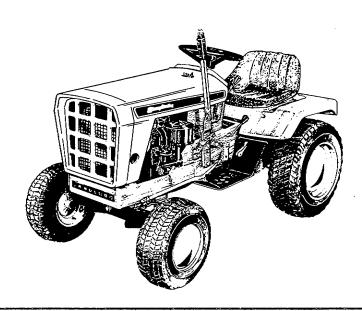
# Simplicity



# OWNEE'S Manual

# LANDLORD

RIDING TRACTOR

3 SPEED TRANSMISSION MFG. NO. 755

LOW SPEED KIT MFG. NO. 772

SIMPLICITY MANUFACTURING COMPANY, INC.

TP 100-1351-00-LL-S

(was 177845)



#### TO THE OWNER

Congratulations on your purchase of the Simplicity tractor. It has been designed with emphasis on the ability to do your most important jobs quickly and efficiently with the least operator effort.

So that you can get the very most from your purchase, you and anyone else who may operate the tractor should study this manual and the owners manual for your attachments before using your Simplicity tractor. Throughout the manual, we will refer to directions as left, right, front, and rear. These directions are as the operator sits on the tractor seat in the driving position.

For your own safety and that of your family and others, periodically review the safety tips found in this manual. You will find the table of contents very useful in referring to this manual when questions arise in the future. We have provided you with information to perform most service jobs quickly and easily, but your Simplicity dealer will be happy to help you with any service or repair work.

When ordering replacement parts for your Simplicity tractor, be prepared to give your dealer the identification numbers found on the tractor and engine identification plates shown below. The identification plate for the tractor is located on the frame in front of the tractor seat. The one for the engine is located on the left side of the engine blower housing. We suggest that you locate the numbers and record them below for easy reference.

SIMPLICITY MANUFACTURING CO., INC. PORT WASHINGTON, WIS., U.S.A. Refer to I.d. no. when writing or ordering parts. I.D. No.

MODEL TYPE CODE

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TRACTOR IDENTIFICATION PLATE

**ENGINE IDENTIFICATION PLATE** 

#### SIMPLICITY'S NEW EQUIPMENT WARRANTY

The Company warrants Simplicity products to be free from defects in material and workmanship, except the Company makes no warranty, express or implied, with respect to tires, engines, generators and voltage regulators, which are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year (45 days for equipment used for rental, municipal or commercial purposes) under normal use, from date of purchase, will be replaced without charge, provided such part is returned to the factory, (if requested), and is found to be defective upon examination at the factory. This warranty does not apply to any Simplicity products altered outside of the Simplicity factory. THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE. The Company's obligation under its warranty is strictly and exclusively limited to the replacement of such parts, and in no event shall the Company be liable for any other damages, whether direct, immediate, incidental, special, or consequential. Simplicity Manufacturing Company, Inc., reserves the right to modify or change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

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#### SAFETY PRECAUTIONS TO PROTECT YOURSELF AND OTHERS

#### OPERATION

Know the controls and how to stop quickly - READ THE OWNER'S MANUAL.

Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction.

Do not carry passengers. KEEP CHILDREN AND PETS A SAFE DISTANCE AWAY.

Clear work area of objects which might be picked up and thrown.

Take all possible precautions when leaving vehicle unattended; such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.

Do not stop or start suddenly when going uphill or down hill. Mow up and down the face of steep slopes; never across the face.

Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

Stay alert for holes in terrain and other hidden hazards.

Use care when pulling loads or using heavy equipment.

- A. Use only approved drawbar hitch points.
- B. Limit loads to those you can safely control.C. Do not turn sharply. Use care when backing.
- D. Use counterweight (s) or wheel weights when suggested in owner's manual.

Watch out for traffic when crossing or near roadways.

Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.

Do not alter basic engine governor settings or overspeed engine.

Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.

#### **FUEL & FIRE HAZARDS**

Handle gasoline with care - it is highly flammable.

Use approved gasoline container.

B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled

gasoline.

C. Open doors if engine is run in garage - exhaust fumes are dangerous. Do not run engine indoors.

Never store equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark.

Allow engine to cool before storing in any enclosure.

To reduce fire hazard keep engine free of grass, leaves or excessive grease.

#### **ATTACHMENTS**

Disengage all attachment clutches and shift into neutral before attempting to start engine.

Disengage power to attachments and stop engine before leaving operator position.

Disengage power to attachment (s) and stop engine before making any repairs or adjustments.

Disengage power to attachments when transporting or not in use.

When using any attachments never direct discharge of material toward bystanders or allow anyone near vehicle while in operation.

Keep vehicle and attachments in good operating condition and keep safety devices in place. Use quards as instructed in owner's manual.

Vehicle and attachments should be stopped and inspected for damage after striking a foreign object and the damage should be repaired before restarting and operating the equipment.

When using vehicle with mower:

 Mow only in daylight or in good artificial light.
 Never make a cutting height adjustment while engine is running if operator must dismount to do so. Shut engine off when unclogging chute.

(4) Check blade mounting bolts for proper tightness at frequent intervals.

If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.

# **OPERATION**

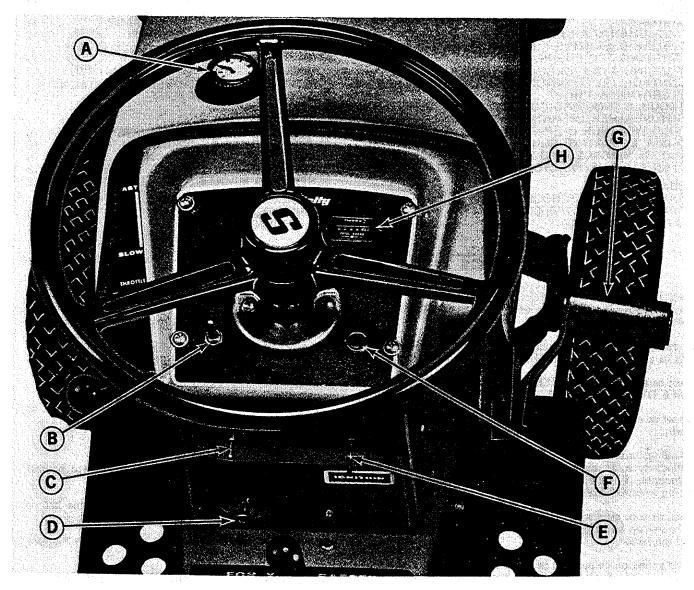


Figure 1. Tractor instrument panel as seen from the operators position on tractor seat.

# INSTRUMENTS AND CONTROLS-HOW TO UNDERSTAND AND USE THEM

Picture yourself seated on your Landlord tractor. Before starting the engine, lets learn how to understand and use the instruments and controls. The paragraphs referring to the instruments and controls are illustrated on figures 1 through 4.

IGNITION SWITCH: (Figure 1, item E) To actuate the ignition switch first insert the ignition key as shown. When the key is turned clockwise to the first position, the ignition is ON. In the ON position the lights, hourmeter, etc. will operate. Turn the key clockwise past the ON position to the START position to actuate the starter. THE TRANSMISSION SHIFT LEVER MUST BE IN THE NEUTRAL POSITION AND THE POWER TAKE OFF CLUTCH CONTROL LEVER (S) MUST BE IN THE DISENGAGED POSITION BEFORE THE STARTER WILL ACTUATE. Release the

key as soon as the engine starts. Return the key to the vertical position to stop the engine. CAUTION: ALWAYS REMOVE THE IGNITION KEY WHEN CLEANING, ADJUSTING, OR SERVICING THE TRACTOR OR ANY ATTACHMENT OR WHEN LEAVING THE VEHICLE UNATTENDED.

CHOKE CONTROL KNOB: (Figure 1, item D) The choke control knob may be pulled out to increase the amount of fuel entering the engine for starting and cold weather warmup. When starting a cold engine in cold weather pull the choke all the way out. Some choke may be required to start the engine when the air temperature is above 70 degrees F. or while the engine is still warm from being recently run. After the engine has started, push the choke in slowly. In cold weather it may be necessary to leave the choke pulled out slightly for three or four minutes while the engine warms up. NEVER OPERATE THE ENGINE WITH THE CHOKE OUT AFTER IT HAS HAD SUFFICIENT

TIME TO WARM UP - ABOUT 5 MINUTES SHOULD BE SUFFICIENT EVEN IN COLD WEATHER.

GENERATOR WARNING LIGHT: (Figure 1, item F) 'he generator light will warn you if the generator or voltage egulator on your tractor is not functioning properly. It is normal for the generator light to come on when the ignition switch is in the ON position and the engine is stopped or running at low speed. The light should go out when the engine is running at higher speeds. If it does not the generator or voltage regulator is not functioning properly. Check the generator belt adjustment as described on page 13. See your Simplicity dealer if the light will not go out after the belt is adjusted.

HOURMETER: (OPTIONAL) (Figure 1, item H) The hourmeter is designed to record the number of hours the engine runs. However, since it is electrically operated, it will run any time the ignition switch is in the ON position even though the engine may not be running. The hourmeter is useful in keeping accurate maintenance records, and also a convenient way of telling how much time the tractor has been used on a particular job.

FUEL GAUGE AND FILLER CAP: (Figure 1, item A) The fuel gauge indicates the amount of fuel in the tank. Before adding fuel, shut off the engine and allow it to cool. To remove the fuel gauge and filler cap for adding gasoline, turn the fuel filler gauge-cap counter-clockwise. The fuel tank holds approximately 3 gallons - enough for about 3 hours of mowing. Use leaded or non-leaded "regular" grade automove gasoline. CAUTION: DO NOT ALLOW LIGHTED CIGARETTES, MATCHES, ETC., AROUND ANY OPEN GASOLINE CONTAINER. DO NOT OVERFILL; WIPE UP ANY SPILLED GASOLINE.

LIGHT SWITCH: (OPTIONAL) (Figure 1, item C) The switch should be moved up to the ON position to turn on the tractor lights. To prevent the lights from being turned on by unauthorized persons, the ignition switch must also be in the ON position for the lights to operate. To turn the lights off, push the light switch down to the OFF position. DO NOT OPERATE THE LIGHTS FOR LONG PERIODS OF TIME (MORE THAN 20 MINUTES) WHEN THE GENERATOR LIGHT IS ON OR THE BATTERY MAY DISCHARGE ENOUGH SO IT WILL NOT START THE ENGINE.

POWER LIFT SWITCH: (OPTIONAL) (Figure 1, item B) The power lift switch controls the electrically operated power lift unit. Push the toggle switch forward when you wish to raise a front center or rear mounted attachment. Pull it back toward you to lower the attachments. The power lift will stop and hold in any position when you release the toggle switch. The height indicator (Figure 6, item A) on the left side of the tractor can be used to determine what position the lift is in. The lift motor will ratchet when it has reached the end of its travel. Ratcheting is not harmful to the unit, but you should release the toggle switch as soon as ratcheting begins to prevent unnecessary wear. If the motor is allowed to ratchet for an extended period of time, a circuit breaker will open, disconnecting power to the lift motor. It will automatically reset after about a minute.

CLUTCH AND BRAKE PEDAL: (Figure 1, item G) Depressing the pedal will first disengage the tractor drive clutch. As you continue to depress the pedal, the brakes will be applied to stop the tractor.

TRANSMISSION SHIFT LEVER: (Figure 2, item A) The transmission shift lever is used to select the desired transmission gear speed and direction. There are three forward and one reverse position. The approximate ground speed in miles per hour for each at full engine speed (3600 RPM) is shown below:

GEAR	STANDARD	LOW SPEED KIT INSTALLED
First	1.5 MPH	.96 MPH
Second	3.5 MPH	2.3 MPH
Third	5.8 MPH	3.7 MPH
Reverse	2.9 MPH	1.9 MPH

The diagram printed on the tractor frame shows the location of each position. To shift the transmission into reverse or second, pull the shift lever back toward you, then push it all the way to the right or left into the desired position. To shift into first or third, push the shift lever forward and move it left or right all the way to the desired position. Do not attempt to move the shift lever unless the foot pedal (Figure 1, item G) is depressed and tractor motion is stopped. The shift lever must be in the neutral START position for the engine to start.

PARKING BRAKE LOCK: (Figure 2, item B) To lock the parking brake grasp the lock, and pull it upward and back until the handle rests against the foot rest as shown in figure 2. To release pull the top portion away from the foot rest and down. It should be locked in the up position to prevent the tractor from rolling whenever the operator leaves the tractor seat.

SPEED CONTROL LEVER: (Figure 2, item C) The engine speed control lever is used to set the desired engine

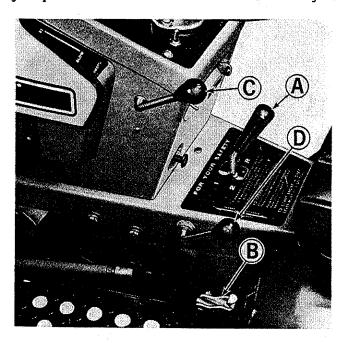


Figure 2. Controls on left side of tractor.

speed. The speed control lever should be moved forward away from the operator to increase engine speed or back toward the operator to reduce engine speed. Consult the appropriate section of this manual for specific information on suggested settings of the engine speed control lever. For example: starting the engine, page 5. Controlling tractor ground speed page 5, and the Operation Chart on page 7.

POWER TAKE OFF CONTROL LEVER: (Figure 2 item D) This power take off lever controls power to center or rear mounted attachments such as a mower or rotary tiller which are driven by the power take off. Pull the lever up and move it forward until it snaps over center to engage the power take off. Pull it back and down to disengage. The tractor engine should be running at 1/2 to full engine speed when the power take off is engaged to absorb the added load. CAUTION: ALWAYS DISENGAGE THE POWER TAKE OFF, AND WAIT UNTIL ALL ATTACHMENTS HAVE STOPPED MOVING BEFORE LEAVING THE TRACTOR SEAT. The power take off control lever must be disengaged before the engine will start. Always move the lever all the way to the engaged or disengaged position.

MANUAL LIFT LEVER: (Figure 3, item A) The lift lever is used for lifting mounted attachments, such as the rotary mower, or the tiller out of the operating position so they can be transported. You can also regulate the operating height of attachments, such as the grader blade, and snow thrower, by using the notches and pin holes provided. The thumb button (B) on top of the handle is provided to disengage the catch from the quadrant so the lever can be moved forward or back as desired and locked into position. See the owners manual for any attachment you may be using with the tractor for specific information on how the lift lever should be used.

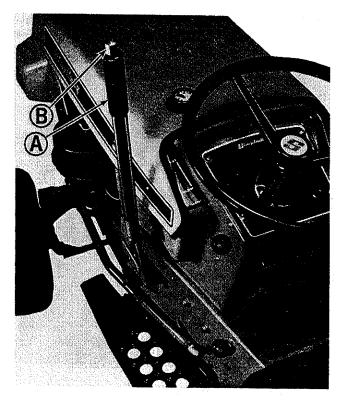


Figure 3. Manual lift lever on left side of tractor.

DUAL LIFT LEVER: (OPTIONAL) (Figure 4, item.A) The dual lift lever provides a convenient means of operating a front mounted attachment such as a snow thrower or a snow plow and dozer blade independently of center or remounted attachments. A good example is if you wish to u the rotary tiller and the snow plow and dozer blade in preparing a seed bed. Both attachments can be mounted to the tractor at the same time, and the operator can conveniently raise of lower each of them from the tractor seat.

#### BEFORE OPERATING THE TRACTOR

Though your Simplicity dealer may have performed the before starting checks listed below, we suggest that you personally check each one so that you will become familiar with them and also to insure that your tractor is ready to operate the first time you use it.

TIRE INFLATION: The tires should be checked and inflated to the proper pressure before operating. Front tires should have 12 to 15 PSI of air and rear tires 6 to 8 PSI of air.

CRANKCASE OIL: Before starting the engine, insure the engine crankcase is filled with the correct grade and weight of oil. See page 15 in the maintenance section of this manual for instructions on checking the oil and the correct oil to use.

FUEL SUPPLY: Fill the fuel tank completely with clean fresh leaded or non-leaded regular grade automotive gascline. (Do not mix oil with gasoline). Premium gasolines a not recommended as they increase carbon deposits in the engine. CAUTION: GASOLINE IS HIGHLY FLAMMABLE. NEVER ALLOW ARTICLES SUCH AS LIGHTED MATCHES, OR CIGARETTES, WHICH COULD CAUSE IT TO IGNITE NEAR OPEN GASOLINE CONTAINERS. DO NOT

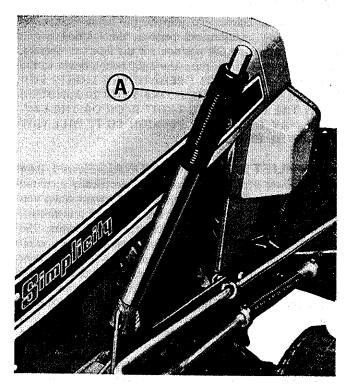


Figure 4. Dual lift lever.

OVERFILL. WIPE UP ANY SPILLED FUEL. BE SURE THE ENGINE IS NOT RUNNING AND HAS BEEN ALLOWED TO COOL BEFORE ADDING FUEL.

BEVEL GEAR BOX OIL: See figure 29. Remove the pipe plug (A) from the elbow at the rear of the bevel gear box. Oil should be present at the bottom of the filler elbow. If it is not, add 90 weight transmission oil until it is visible in the bottom of the elbow.

AIR CLEANER: Insure that the air cleaner is in place and properly sealed. If it is dirty, clean or replace it according to the instructions on page 18, in the maintenance section of this manual.

BATTERY: Check the battery to be sure it is filled to the proper level with electrolyte and the vent holes in each of the filler caps are open. See page 18 in the Maintenance section of this manual.

TRANSMISSION OIL: See figure 28. Remove the pipe plug (A) to check the oil. The oil should be level with the bottom of the threads. If it is not, add 90 weight transmission oil until it is level with the lower threads in the hole.

**LUBRICATION:** Lubricate all grease zerks and pivot points according to the every 25 hour maintenance instructions on page 17 of this manual. A pisto-luber grease gun specially designed for this purpose is available from your Simplicity dealer.

ATTACHMENTS: Read and become familiar with the Attachments Manual for any attachments you are using with your tractor.

SEAT ADJUSTMENTS: The seat should be adjusted so the operator can comfortably depress the clutch and brake pedals while sitting back in the seat. See page 10 in the Adjustment section of this manual if the seat requires adjusting.

#### STARTING THE ENGINE

- 1. Refer to the Instruments and Controls section beginning on page 2 of this manual for the location and use of the instruments and controls. CAUTION: IT IS DANGEROUS TO START THE TRACTOR UNLESS YOU ARE SEATED IN THE TRACTOR SEAT. Insure that the power take off clutch control lever (s) are in the disengaged position, and the transmission shift lever is in the neutral START position.
- 2. Move the engine speed control lever to midway between slow and fast.
- 3. Pull the choke knob out. In cold weather pull it all the way out. In warmer weather or when starting an engine which is still warm from recent operation less choke will be required.
- 4. Depress the clutch brake pedal and hold it down to disengage the transmission drive. Although the engine may be started without disengaging the clutch, in cold weather it will start easier with the clutch disengaged since the starting motor will not have to turn the transmission in addition to the engine.
- 5. Insert the ignition key and turn it to the right past the ON position to the START position to engage the starter motor. As you turn the key, check the Generator warning light

to see that it is functioning properly.

- 6. When the engine starts, release the key and allow it to return to the ON position. Slowly push the choke in. After the engine has run for a few minutes it should not require any choking. If the engine does not start after about 10 seconds of cranking it may be receiving too rich a fuel mixture. Push the choke in and try again. The engine may not need to be choked when starting it in warm weather or if it has been operated recently.
- 7. Release the clutch-brake pedal as soon as the engine is running smoothly.

#### STOPPING THE ENGINE

- 1. Move the engine speed control lever to the SLOW position.
- 2. If the tractor has been operating under full load, allow the engine to idle for about a minute to reduce the engine temperature. Stopping a hot engine too suddenly can damage engine parts.
- 3. Turn the ignition key counter-clockwise to the vertical position to stop the engine.
- 4. Set the parking brake.
- 5. Remove the ignition key to prevent unauthorized use of the tractor.

#### CONTROLLING TRACTOR GROUND SPEED

Tractor ground speed can be controlled by the position of the transmission shift lever and/or the engine speed control lever

#### **ENGINE SPEED**

Most power take off driven attachments operate best at a particular speed. Since the speed of the power take off drive is directly related to the engine speed it is desirable to adjust the attachment speed and use the transmission shift lever to select the gear which will give the desirable ground speed. For pulling light loads or transporting the tractor and attachments from one area to another, adjusting the engine speed is one method of controlling tractor ground speed.

#### TRANSMISSION SHIFT LEVER

The transmission shift lever should be used to select the correct ground speed for the job to be performed. See the chart on page 7 for recommended gear selection for various jobs. The clutch pedal may be used for slowing, turning or when working in confined areas where both hands are needed for steering.

#### STARTING TRACTOR TRAVEL

Assure yourself that the area in which you are going to drive the tractor is free of obstructions. Release the parking brake and look around to insure there are no obstructions in your path. Depress the clutch-brake pedal and shift the transmission to the desired gear. Release the clutch-brake pedal slowly to prevent abrupt and dangerous speed changes. CAUTION: DO NOT STOP OR START SUDDENLY WHEN GOING UP OR DOWN HILL. MOW UP AND DOWN THE FACE OF STEEP SLOPES; NEVER ACROSS THE FACE. REDUCE SPEED ON SLOPES AND IN SHARP TURNS TO PREVENT TIPPING OR LOSS OF CONTROL. EXERCISE EXTREME CAUTION WHEN CHANGING DIRECTION ON SLOPES.

Attachment	Standard or Low Speed Kit	Engine Speed Control	Transmission Gear Selection	Approx. Ground Speed (MPH)	Required Accessories and Options	Recommended Accessories and Options
Transporting Tractor	Standard		1 3 2 R	3 - 5.5		
	Low Speed Kit	$ S^{\alpha} $	$\begin{bmatrix} 1 & & & \\ 2 & & & R \end{bmatrix}$	1 - 3.5		
42" Rotary Mower (Smooth terrain - normal grass)	Standard	S	$\begin{array}{c} 1 \\ 2 \end{array}$	4 - 5.5		2 rear wheel weights when mowing slopes 20 - 40%
	Low Speed Kit	S	1 2	3 - 3.5		mowing slopes greater than 40% not recommended
42" Rotary Mower (Rough terrain - heavy or	Standard	S	$\begin{bmatrix} 1 & 3 \\ 2 & R \end{bmatrix}$	3.5		2 rear wheel weights when mowing slopes 20 - 40%
wet grass)	Low Speed Kit	S	1 3 2 3 R	3.5		mowing slopes greater than 40% not recommended
46" Sickle Bar	Standard	S	$\begin{bmatrix} 1 & 3 \\ 2 & R \end{bmatrix}$	3 - 3.5		2 rear wheel weights when mowing slopes 20 - 40%
	Low Speed Kit	S	$\begin{bmatrix} 1 & & & \\ 2 & & & R \end{bmatrix}$	3 - 3.5		mowing slopes greater than 40% not recommended
38" Lawn Revitalizer	Standard	S	$\frac{1}{2}$ R	1 - 1.5	*! // + <del>}</del> !	7:147:1
	Low Speed Kit	S	$\begin{array}{c c} 1 & 3 \\ \hline 2 & R \end{array}$	1.5 - 2	חפמו בוון ואון	rower IIII KIL
36" Snow Thrower (Light Snow)	Standard	S	$\begin{array}{c c} 1 & 3 \\ \hline 2 & R \end{array}$	3 - 3.5		Power lift kit Tire chains
	Low Speed Kit	S	$\begin{bmatrix} 1 & & & \\ 2 & & & R \end{bmatrix}$	3 - 3.5		4 rear wheel weights 2 front wheel weights
36" Snow Thrower (Heavy or wet snow)	Standard	S	1 3 2 R	1.5		Power lift kit Tire chains
	Low Speed Kit	S	1) 3 2	<del></del>		4 rear wheel weights 2 front wheel weights

				Approx.		
	Standard	Fucine Speed	Transmission	Ground		
Attachment	Low Speed Kit	Control	Selection	(MPH)	Required Accessories and Options	Recommended Accessories and Options
42" or 46" Snow Plow and Dozer Blade	Standard	S	$\begin{bmatrix} 1 & 3 \\ 2 & 1 \end{bmatrix}$	2 - 3.5		Tire chains 4 rear wheel weights
egy days	Low Speed Kit	S	1 3 3 R	2 - 3.5		2 front wheel weights Power lift kit
42" Grader Blade	Standard	S	1 2 R	2 - 3.5		
	Low Speed Kit	S	1 3 2 R	1.5 - 3.5		4 Rear wheel weights
36' Rotary Tiller	Standard	S/SE	(1) 3 2 - R	1 - 1.5		4 rear wheel weights
	Low Speed Kit	S	(1) 3 2 2 R	.8 - 1	near Lift NIt	2 front wheel weights Power lift kit
10" Mounted Plow	Standard	S	1) 3 2 2 R	1.5		4 rear wheel weights
	Low Speed Kit	S	(1) 3 2 2 R	-	Rear Lift Kit	2 front wheel weights Power lift kit
Cultivator	Standard	S	2 3	2 - 3		4 rear wheel weights
	Low Speed Kit	S	1 (3)	2 - 3.5	Rear Lift Kit	2 front wheel weights Power lift kit
Spring Tooth Harrow	Standard	S	1 3 2 E	2-3		4 rear wheel weights
	Low Speed Kit	S	1 2 R	2 - 3.5	Rear Lift Kit	2 front wheel weights Power lift kit

Figure 5. Operation Chart

REFER TO YOUR ATTACHMENT OWNERS MANUALS FOR ADDITIONAL INFORMATION.

### TROUBLE SHOOTING GUIDE

PROBLEM OR SYMPTOM	POSSIBLE CAUSES	CHECKS AND CORRECTIONS
Starter will not turn engine over.	Transmission shift lever not in neutral position. Power take off control lever (s). not in disengaged position. Battery discharged or dead. Protective circuit breaker tripped. Neutral safety start switches not properly adjusted. Wiring loose or broken.	Move transmission shift lever to neutral.  Move control lever (s) to disengage position.  Check the battery - charge or replace as necessary. Wait a minute for circuit breaker to reset. Adjust the safety switch for the transmission. See page 12.  Visually check wiring, replace any broken or frayed wires, tighten loose connections.
Engine turns — will not start.	Out of fuel. Engine flooded. Crankcase oil too heavy. Fuel filter plugged. Water in gasoline. Breaker points or spark plugs worn or dirty.	Fill fuel tank. Push choke in, attempt to start. Change oil as recommended on page 16. Replace fuel filter. See page 19. Drain fuel tank, replace fuel filter. Check and replace or set. See page 20.
Engine starts hard or runs poorly.	Fuel mixture too rich.  Spark plugs worn or dirty.	Push choke in. Clean air filter element. See page 18. Check and replace or set. See page 20.
Engine knocks.	Not enough oil in crankcase. Using wrong weight of oil. Using wrong grade of gasoline.	Add oil as required. See page 15. Change oil, use weight recommended for weather conditions. See page 16. Use regular grade automotive gasoline.
Tractor drive clutch will not disengage.	Too much clutch free travel.	Adjust clutch pedal free travel. See page 11.
Engine will not idle smoothly.	Air Cleaner Dirty. Water in fuel tank. Carburetor idle mixture set incorrectly. Spark plugs worn or not set properly.	Clean or replace air cleaner. See page 18. Remove fuel tank to drain, replace fuel filter. Set idle mixture. See page 13. Adjust or replace. See page 20.
Excessive Oil Consumption.	Engine running too hot. Using wrong weight of oil. Too much oil in crankcase.	Clean engine fins and fan screen. See page 15. Change to correct weight oil. See page 16. Check oil level according to instructions on page 15
Exhaust is black or smoky.	Air filter element dirty. Fuel mixture too rich.	Clean or replace filter element.  Be sure choke opens fully when it is pushed way in. Set carburetor adjustment. See page 13.
Engine runs, tractor will not drive or operate with full power.	Transmission shift lever in neutral. Parking brake ON. Main drive belts are slipping.	Put transmission in gear.  Release parking brake.  Adjust clutch belt tension and free travel. See page 11.
Brake will not hold.	Brakes need adjusting. Worn brake lining.	Adjust brake linkage. See page 11. Have your Simplicity dealer replace lining.
Tractor drive clutch will not engage.	Too little clutch free travel.	Adjust clutch free travel. See page 11.
Tractor handles poorly.	Steering linkage or front axle loose. Tires not properly inflated. Wheels are spinning or slipping. Moving too fast on sloping surfaces.	Tighten any loose connections.  Inflate tires correctly. Six to eight pounds in rear and 12 - 15 pounds in front.  Use weights to provide additional stability and traction.  Reduce speed.
Power lift will not operate.	Ignition switch may not be on. Circuit breaker may have cut out.	Turn ignition switch on. Wait about a minute for circuit breaker to reset.
Drive belt slips.	Belt stretched or worn. Pulleys may be greasy or oily. Too little clutch free travel.	Replace with correct Simplicity belt. Clean with non-flammable solvent. Adjust free travel. See page 11.

#### STOPPING TRACTOR TRAVEL

To stop the tractor depress the clutch-brake pedal to disengage the clutch and apply the brake for stopping. Before leaving the tractor seat, shut off the engine, set the parking brake, and remove the ignition key.

#### HOT WEATHER OPERATION

When operating the tractor at temperatures above 75°F pay particular attention to the following items to prevent damage.

- 1. Keep the engine cooling fins and fan screen clean and free of obstruction which would decrease air flow to and from the engine. See page 15 for cleaning instructions.

  2. Insure that you are using the proper grade and weight of the continuous for the proper grade and weight of the continuous for the proper grade and weight of the continuous for the proper grade and weight of the continuous for the proper grade and weight of the proper grade and the proper
- 2. Insure that you are using the proper grade and weight of oil in the engine for the temperature where the tractor is being used. Check the oil level each time you fill the fuel tank. DO NOT OVERFILL THE CRANKCASE ENGINE OVERHEATING MAY RESULT.
- 3. Check the battery water level more frequently than every 25 hours which is recommended under normal conditions. High temperatures cause faster evaporation of water from the battery.
- 4. Remove the carburetor heat deflector used with the snow thrower or dozer blade.

#### COLD WEATHER OPERATION

When the tractor is being used in temperatures below 30°F, check the following items closely:

- 1. Use the correct grade and weight of oil for the temperaure conditions. Change the oil only when the engine is warm.

  If an unexpected temperature drop occurs when the engine
  is filled with summer oil, before starting the engine, move
  the tractor to a warm location until the oil will flow freely.

  2. Use freely finel Fill the finel table of the each days was to
- 2. Use fresh fuel. Fill the fuel tank after each days use to protect against moisture condensation.
- 3. Disengage the clutch when starting the engine.
- Install the heat deflector furnished with the snow thrower or dozer blade if these attachments are to be used.

#### **DUSTY OPERATING CONDITIONS**

When the tractor is operated in dusty or dirty conditions check the following items closely:

- 1. Keep the engine fins and cooling fan screen clean and free of materials which will decrease air flow.
- 2. Service the air cleaner more frequently. Clean or replace it as often as necessary to allow air to flow to the carburetor freely.

3. Change the engine oil more frequently. The oil should be changed more often than every 25 hours as is recommended under normal conditions. In extremely dusty conditions, change every 10 operating hours.

#### **OUT OF SERVICE PROTECTION (Storage)**

When the tractor is to be stored without use for a month or longer, the following precautions should be taken to insure your tractor will be ready to go when you need it:

- 1. Unless you wish to run the tractor until the fuel tank is empty, add a good brand of gasoline stabilizer. This additive, Stabil, available from your Simplicity dealer, prevents formation of gum and varnish for up to one year, providing easier starting and a cleaner fuel system.
- 2. Drain and refill the engine crankcase while the engine is warm. Tie a tag on the tractor indicating what grade and weight of oil was used.
- 3. Remove the spark plug and pour one ounce (two table-spoons) of SAE 30 engine oil into the cylinder. Engage the starter to turn the engine over a few times, then reinstall the spark plug.
- 4. Clean the air cleaner element as described on page 16, of the Maintenance instructions.
- 5. Plug the exhaust outlet to prevent the entrance of moisture, dirt, bugs, etc.
- 6. Insure the battery is filled to the proper level with water and is fully charged. Battery life will be increased if it is removed and put in a cool dry place and fully charged about once a month.
- 7. Grease all grease zerks and put oil on the lubrication points shown in the Maintenance section.
- 8. If the tractor is to be stored 6 months or longer block the tractor up off the wheels to relieve weight and keep the tires off a damp floor. Protect the tires from prolonged exposure to direct sunlight.
- 9. Store the tractor in a dry place indoors.

#### STARTING THE TRACTOR AFTER STORAGE

Before starting the tractor after it has been stored, do the following:

- 1. Remove the blocks from under the tractor.
- 2. Replace the battery.
- 3. Unplug the exhaust outlet.
- 4. Perform the "Before Operating the Tractor" instructions found on page 4 of this manual.

# **ADJUSTMENTS**

Most of the adjustments described here are easy to perform. Some of the adjustments require a little mechanical knowhow and some special tools to do them well. You may wish to have your Simplicity dealer make some or all of the adjustments as they are required; however, we have given instructions for them here as a convenience to you should you wish to make them yourself. CAUTION: DO NOT ATTEMPT TO MAKE ANY ADJUSTMENTS WHILE THE ENGINE IS RUNNING UNLESS REQUIRED IN THE INSTRUCTIONS. IF THE ENGINE MUST BE RUNNING TO MAKE AN ADJUSTMENT, BE CAREFUL TO STAY CLEAR OF ANY MOVING PARTS.

The Landlord tractor has been designed for easy accessibility to the areas which need to be reached in making adjustments and performing maintenance. The underside of the frame is open to provide easy access to areas requiring lubrication, adjustment, or repair.

#### RAISING THE TRACTOR HOOD

See figure 6. The tractor hood is hinged at the front by two spring loaded bolts. It may be easily opened by releasing the two rubber straps (B) located on either side of the hood. Pull down and out on the straps to release them. See figure 7. Lift upward on the back of the hood to raise it as shown. The hood raised in this position provides easy access to the generator, battery, fuel tank, engine, etc.

#### **RAISING THE SEAT DECK**

See figure 8. The tractor seat deck (A) is hinged at the back. To raise the seat deck, reach under it from each side and pull the two locking levers (B) to the outside. As you hold the locks out raise the seat deck as shown in figure 9. Raising the seat deck in this manner will expose many of the

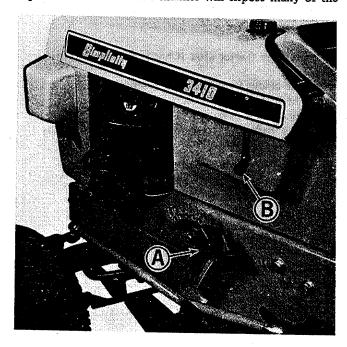


Figure 6. Left side of tractor.

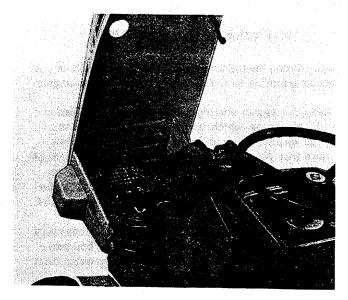


Figure 7. Tractor hood raised for easy access.

transmission adjustment and maintenance areas.

#### **SEAT ADJUSTMENT**

See figure 9. The tractor seat is properly adjusted when the operator can comfortably operate the clutch and brake pedal while sitting back in the seat. The seat can be adjusted forward or back in any of four positions. If adjustment is required, proceed as follows:

- 1. See figure 9. Position the seat deck as shown by following the instructions under Raising the Seat Deck on page 10.
- 2. Remove the two cap screws and lock washers at (A).
- 3. Remove the two nuts and lock washers at (B).
- 4. If the seat is to be positioned in either of the two forward

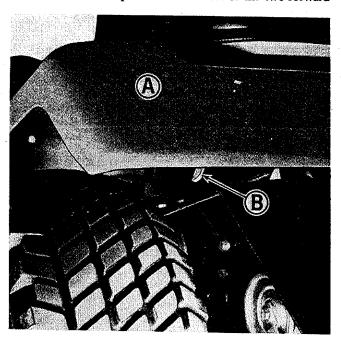


Figure 8. Seat deck release at front of seat deck.



Figure 9. Seat deck raised.

sets of mounting holes the two rubber spacers are placed over the studs at (B) and used between the seat and seat deck. If the seat is to be positioned in either of the two rearward positions, the rubber spacers are placed over the studs (B), but under the seat deck. Line the seat up with the desired holes in the seat deck, and install the rubber spacers according to the holes used.

- 5. Install the two lock washers and nuts at (B) and tighten them securely.
- 6. Install the two cap screws and lock washers at (A) and tighten them securely.
- /. Lower the seat deck.

#### **CLUTCH FREE TRAVEL**

See figure 10. The clutch free travel is correct when there is 1/4" between the nuts (A) and the rod guide when the clutch brake pedal is released and pulled rearward as far as it will go. If adjustment is required, proceed as follows:

1. Raise the seat deck as shown in figure 9, by following the instructions under Raising the Seat Deck on page 10.

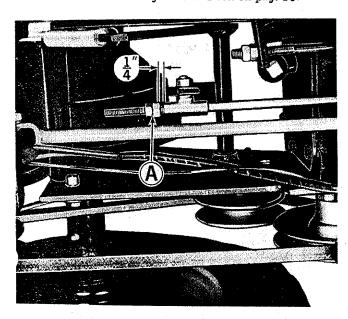


Figure 10. Clutch free travel adjustment.

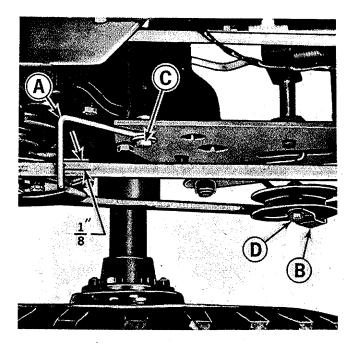


Figure 11. Belt Stop Adjustments.

- 2. Using two wrenches hold the forward nut at (A) stationary with one wrench while turning the rearward nut counterclockwise slightly with the other to separate them.
- 3. Pull rearward on the clutch brake pedal to insure it has returned completely to the engaged position.
- 4. Turn the forward nut at (A) as necessary so that the distance between it and the rod guide is 1/4" as shown in figure 10.
- 5. Using two wrenches hold the forward nut at (A) stationary while turning the rear one clockwise to tighten the two nuts together securely.
- 6. Lower the seat deck.

#### DRIVE BELT STOP ADJUSTMENT

See figure 11. With the clutch-brake pedal released, the belt stops at (A) and (B) should be positioned as shown. There should be 1/8" clearance between belt stop (A) and the belt as shown. If adjustment is required, loosen the cap screw at (C) and position the belt stop correctly. Tighten cap screw (C) securely after making the adjustment.

The belt stop (B) should be about 1/8" from the belt and centered on the belt as shown so the belt does not rub either side of the belt stop. Capscrew (D) can be loosened slightly if adjustment is required.

#### FOOT PEDAL BRAKE ADJUSTMENT

The foot pedal brake should be adjusted so that it will stop the tractor when it is moving backward, but not so tight to prevent the foot pedal from traveling far enough to disengage the clutch. If adjustment is required proceed as follows:

- 1. See figure 12. Use one open end wrench to hold nut (A) stationary, and another wrench to turn nut (B) counterclockwise to loosen it slightly.
- 2 Turning nut (A) clockwise will give more braking action and turning it counter-clockwise will give less. The brake ad-

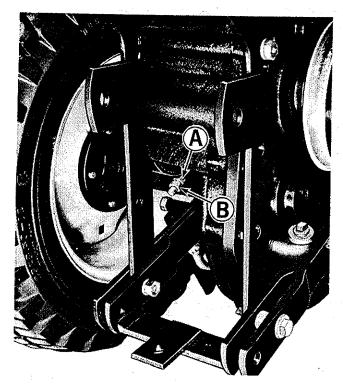


Figure 12. Brake adjustment near left rear wheel.

justment can best be made by using the trial and error method, and operating the tractor each time an adjustment has been made. The best adjustment can be made by turning nut (A) counter-clockwise until the foot pedal brake does not work. Then turning it clockwise, one turn at a time, until the tractor will stop satisfactorily when rolling backward. This is the correct adjustment. Further tightening may cause the brake to drag, or prevent proper clutch disengagement.

3. After you are satisfied that the adjustment is correct use one wrench to hold nut (A) stationary and another to turn nut (B) clockwise to tighten the nuts securely together.

#### PARKING BRAKE ADJUSTMENT

Although the transmission may help prevent the tractor from rolling when it is in gear and the engine stopped, the parking brake should be properly adjusted and used whenever the operator leaves the tractor seat. The parking brake is actuated and adjusted independently of the foot brake. It is correctly adjusted when it will prevent the tractor from rolling either forward or backward and some resistance is felt when it is placed in the engaged position. If it is too tight, it will be difficult to place it in the engaged position. To adjust the parking brake, proceed as follows:

- 1. See figure 13. NOTE: ALL DIRECTIONS GIVEN FOR ADJUSTING THE PARKING BRAKE, ARE AS IF YOU ARE STANDING AT THE FRONT OF THE TRACTOR LOOKING BACK TOWARD THE PARKING BRAKE. Loosen nut (A) by turning it clockwise.
- 2. See figure 13. After insuring the tractor is either on a level surface or the wheels are blocked so it will not roll, pull forward on the parkingbrake handle (B) to disengage the parking brake.
- 3. Rotate parking brake handle (B) clockwise to tighten the parking brake, or counter-clockwise to loosen it. Turn the

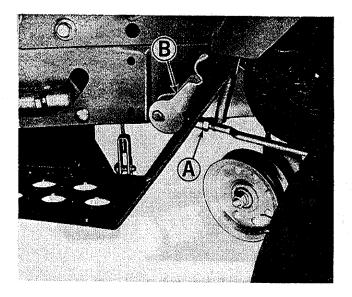


Figure 13. Parking brake adjustment on left side of tractor.

handle one complete revolution when making any adjustment. After turning the handle (B) one revolution place it in the engaged position as shown in figure 13, with the handle at approximately in the one o'clock position as you face it from the front of the tractor.

4. After the correct adjustment has been made, use a wrench to tighten nut (A) securely by turning it counter-clockwise.

# TRANSMISSON NEUTRAL SAFETY START SWITCH

If the engine starter will not actuate when the transmission shift lever is in neutral position or will actuate when the transmission shift lever is not in the neutral position, the neutral safety starting switch may need adjusting. Be sure power takeoff lever (s) is disengaged. Adjust transmission safety start switch as follows:

- 1. Raise seat deck (page 10).
- 2. Place transmission shift lever in the neutral START position.
- 3. See figure 14. Adjust carriage bolt (A) to proper height

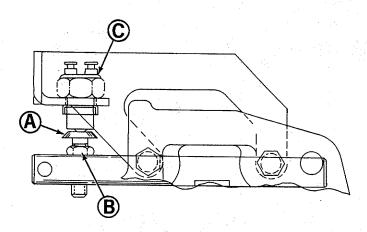


Figure 14. Neutral safety start switch located under seat deck.

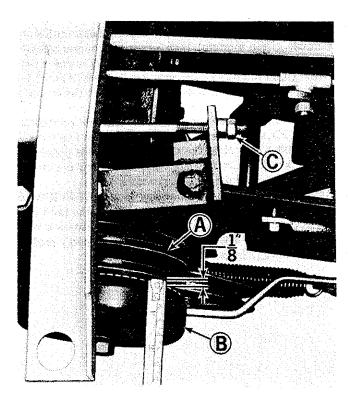


Figure 15. Power take off clutch.

so switch (C) will make contact when transmission is in neutral START position.

- 4. Tighten hex nut (B) against shift rod.
- 5. Lower seat deck and check adjustment by starting tractor.

#### POWER TAKE-OFF CLUTCH ADJUSTMENT

See figure 15. The power take off clutch is properly adjusted when pulley (A) moves 1/8" when the power take off control lever is engaged and disengaged. If adjustment is required, proceed as follows:

- 1. Raise the seat deck, by following the instructions on page 10 under Raising the Seat Deck.
- 2. Place the power take off clutch control lever in the engaged position.
- 3. Observe the movement of pulleys (A) in relation to cup (B) as the power take off control is moved slowly from the engaged to disengaged position. If the pulleys (A) move more or less than 1/8" adjustment is required.
- 4. Turn the rear most nut at (C) counter-clockwise to loosen it slightly. To increase the amount pulley (A) travels turn the nuts at (C) clockwise. To decrease travel of pulley (A), turn the nuts counter-clockwise. Adjust the nuts at (C) and observe the travel of pulleys (A) as the power take off lever is engaged and disengaged. When adjustment has been made so the pulley (A) travels 1/8" tighten the rear most nut at (C) against the forward nut to lock them in place.
- 5. Recheck your adjustment.
- 6. Lower the seat deck.

#### STARTER-GENERATOR BELT ADJUSTMENT

See figure 16. If the starter turns, but the engine does not rotate, the starter generator belt may need tightening. Proceed as follows:

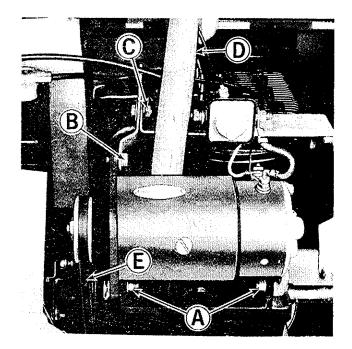


Figure 16. Generator located on right side of engine.

- 1. Raise the tractor hood as explained on page 10 under Raising the Tractor Hood.
- 2. See figure 16. Loosen slightly the two nuts (A) cap screw (B) and nut (C). Use a pry bar (D) similar to the one shown between the generator and engine block to apply pressure to the generator and tighten the belt. The belt should be tight enough so thumb pressure at (E) will deflect it about 1/4".
- 3. While holding the pry bar to maintain tension on the belt, tighten the mounting bracket at (C) securely.
- 4. Actuate the starter to make sure the engine will rotate. If it does not, loosen the nut at (C) and apply more tension to the belt.
- 5. Tighten the two nuts at (A) and the cap screw (B) securely.
- 6. Lower the hood and lock it in place.

#### CARBURETOR ADJUSTMENT

The carburetor is adjusted at the factory and normally does not need adjustment unless it has been disassembled or tampered with.

#### INITIAL ADJUSTMENT

Initial adjustment will permit the engine to be started and warmed up prior to final adjustment. Proceed as follows:

- 1. See figure 17. Turn the needle valve (A) clockwise until it just closes. CAUTION: VALVE MAY BE DAMAGED BY TURNING IT IN TOO FAR.
- 2. Open the needle valve (A) one and one half turns counterclockwise.
- 3. Turn the idle valve (B) clockwise until it just closes.
- 4. Open idle valve (B) one half to three quarter turns.

#### FINAL ADJUSTMENT

- 1. See figure 2. Move the transmission shift lever to the **NEUTRAL** position.
- 2. Start the engine and run it at full speed.

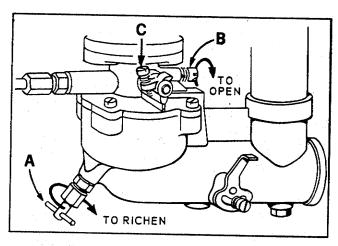


Figure 17. Carburetor adjustments.

- 3. See figure 17. Turn needle valve (A) clockwise until engine misses, (Lean mixture), then turn it out counter-clockwise past the smooth operating point, until the engine runs unevenly (Rich mixture). Now turn needle valve (A) to the mid-point between the rich and lean mixture so the engine runs smoothly.
- 4. Move the engine speed control lever to the slow position, and set the idle speed adjusting screw (C) so a fast idle is obtained (1200 RPM). Hold the throttle in this idle position and turn the idle valve (B) clockwise (lean) and counterclockwise (rich) until the engine idles smoothly.
- 5. Reset the idle speed so the engine idles at 1200 RPM. Push the engine speed control lever forward to the fast position, the engine should accelerate without hesitation or sputtering. If the engine does not accelerate properly, readjust needle valve (A) to a slightly richer mixture.

# MAINTENANCE.

Your Simplicity tractor has been designed and manufactured to give you many years of dependable operation. In order for it to give you efficient, trouble free service over a long period of time the maintenance operations listed here must be performed on a regular basis. The optional hour meter provides an accurate method of determining when these services need to be performed.

A wide variety of attachments and accessories permit use of your tractor throughout the year. BECAUSE YOUR TRACTOR IS A MULTI-SEASON TOOL, IT IS VERY IMPORTANT TO SERVICE THE ENGINE FOR THE SEASON IN WHICHIT WILL BE OPERATED. Be sure to change to winter grade oil before making cold weather starts.

Whenever you are checking fluid levels in any area of the tractor, the readings will be much more accurate if the tractor is setting on level ground. We have provided the Scheduled Maintenance Chart on page 18 as a convenient means for you to know which services should be performed at various times. You should, of course, refer to the detailed explanation of how to perform each maintenance task until you are familiar enough with it to perform it correctly from memory.

Refer to your Briggs & Stratton operating and maintenance instructions for more specific detail on servicing the engine.

#### ORDERING REPLACEMENT PARTS

Replacement parts required for performing maintenance services or repair work should be purchased from your Simplicity dealer. When ordering parts be prepared to give him the tractor and engine identification numbers. If you have not already recorded these numbers on the inside front cover of this manual, we suggest that you do so now for convenient future reference.

#### **EVERY 5 HOURS OF OPERATION**

INSPECT THE TRACTOR AND ENGINE: Make a general inspection of the tractor and engine looking for loose bolts, oil leaks, low tire pressures, etc. A few minutes spent correcting a small problem could prevent a costly breakdown later.

# CHECK ENGINE CRANKCASE OIL LEVEL: See figure 18. If the engine has been running, allow a minute or two for the oil to drain down into the crankcase before checking the oil level. Proceed as follows:

- 1. See figure 18. Turn the engine oil filler cap-dipstick (A) counter-clockwise and lift it out.
- 2. Wipe the oil from the dipstick with a clean cloth.
- 3. Replace the filler cap-dipstick in the filler pipe and turn the cap clockwise finger tight.
- 4. Remove the filler cap-dipstick and check the oil level on the dipstick.
- 5. If the oil is below the full line (B) shown in figure 18, add enough oil to bring the oil level up to the full mark. Use the same grade and weight of oil which is already in the engine. DO NOT OVERFILL THE CRANKCASE.
- 6. Replace the filler cap-dipstick (A) and tighten it securely.

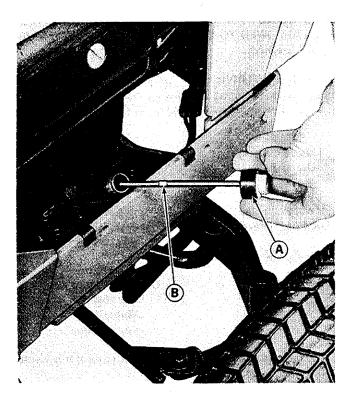


Figure 18. Checking the engine oil at right front of

#### **EVERY 25 HOURS OF OPERATION**

CLEAN ENGINE FINS AND SCREEN: See figure 19. The blower screen (A) must be kept relatively free of chaff, grass, etc., which would restrict the flow of cooling air to the engine. Material which collects can normally be removed with a brush after the engine is shut off. The screen may need to be cleaned more often when mowing dry grass.

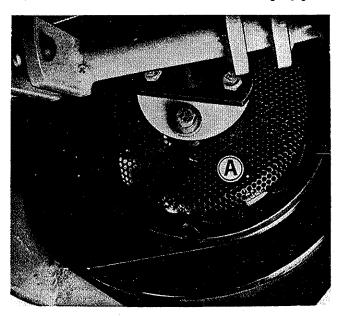


Figure 19. Engine blower screen located at rear of engine as seen from beneath tractor.

See figure 21. All grass and chaff should be removed from the engine fins (A). CAUTION: THE ENGINE FINS ARE VERY HOT AFTER THE ENGINE HAS BEEN OPER—ATED. DO NOT TOUCH THEM UNTIL THE ENGINE HAS BEEN ALLOWED TO COOL. NEVER SPRAY WATER ON A HOT ENGINE.

CHANGE ENGINE OIL: Every 25 hours or more often under dusty operating conditions, change the engine oil, using an oil with designation of SC or SD or MS.

SUMMER WINTER (Above 40°F.) (Under 40°F.) Use SAE 30 Use SAE 5W-20 or **SAE 5W-30** If not available, If not available, Use SAE 10W-30 Use SAE 10W or or **SAE 10W-30 SAE 10W-40** (Below 0°F.) Use SAE 10W or **SAE 10W-30** Diluted 10%

1. Operate the engine at least 10 minutes or until it is warm so the oil will drain freely.

with Kerosene

- 2. See figure 20. Remove the drain plug (A) from the bottom of the engine base and allow the oil to drain.
- 3. After the oil has been completely drained from the engine replace the drain plug and tighten it securely.
- 4. See figure 18. Remove the filler cap-dipstick (A) and pour 2 quarts of oil into the engine through the oil filler pipe, be-

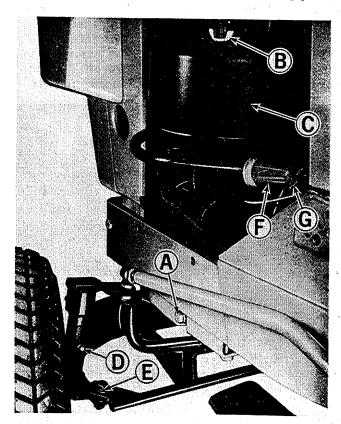


Figure 20. Left front of tractor.

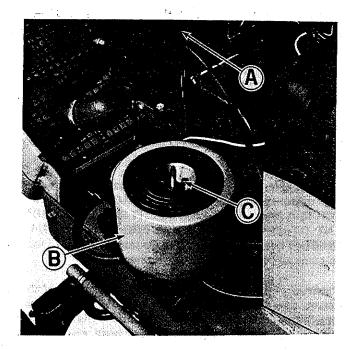


Figure 21. Air cleaner with cover removed on left side of engine.

ing careful not to allow any dirt or foreign material to contaminate the oil.

- 5. Check the oil level. It should show up to the full mark (B) on the dipstick.
- 6. Replace the oil filler cap-dipstick, start the engine and check for leaks.

CLEAN ENGINE AIR FILTER: The foam precleaner should be removed and cleaned at 3 month intervals or every 25 hours of operation, whichever occurs first.

- 1. See figure 20. Remove the wing nut (B) and cover (C) from the air cleaner unit.
- 2. See figure 21. Remove the foam precleaner (B) and wash it in liquid detergent and water and squeeze dry.
- 3. Oil the precleaner with one ounce of engine oil, and squeeze it to distribute the oil evenly.
- 4. Install the foam precleaner as shown in figure 21.
- 5. See figure 20. Replace the air cleaner cover (C) and fasten it securely with wing nut. (B).

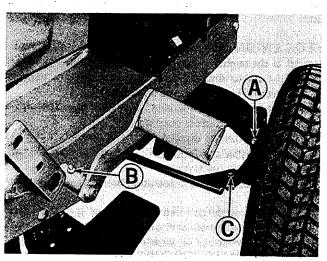


Figure 22. Right front corner of tractor.

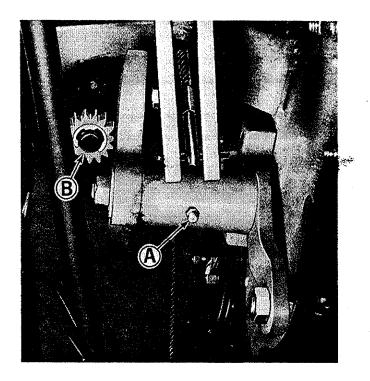


Figure 23. Steering gear as seen from beneath tractor.

LUBRICATE GREASE FITTINGS: Your tractor has 6 grease fittings which should be lubricated every 25 hours with multi-purpose gun grease. Wipe the fittings clean and lubricate each one with five shots of grease, or until the grease is seen being forced from the bearing. When operating under extremely wet or dusty conditions, lubricate more often. The grease fittings are located as follows:

LOCATION	ILLUSTR	ATION
Left Spindle	Figure 20,	Item D
Right Spindle	Figure 22,	
Clutch-brake Pedal	Figure 22,	Item B
Steering Bracket	Figure 23,	Item A
Right Axle Hub	Figure 24,	Item A
Right Axle	Figure 25	Item A

LUBRICATE PIVOT POINTS: Every 25 hours a film of grease should be placed at the end of the neutral start safety switch and on the steering gear to provide smoother operation and help reduce wear. They are located as follows:

LOCATION	ILLUSTRATION
Neutral Safety Start Switch	Figure 14, Item C
Steering Gear	Figure 23, Item B

A few drops of engine oil placed on the tractor pivot points will help reduce wear and provide smoother operation of the tractor and its controls. Every 25 hours or more often under wet or dusty operating conditions, place a few drops of SAE 30 engine oil on the pivot points, being careful not to get oil on belts or pulleys as it may cause them to slip. Pivot points are located as follows:

LOCATION	ILLUSTRATION
Left Tie Rod End	Figure 20, Item E
Right Tie Rod End	Figure 22, Item C
Front Axle Pivot	Figure 27, Item A
Power Take Off Pivot	'Figure 26, Item A

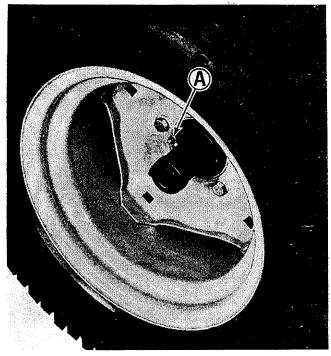


Figure 24. Grease zerk on right rear axle hub.

CHECK TIRE PRESSURE: Tires will last longer and perform better if they are kept properly inflated. They should be inflated as follows; Front tires 12 to 15 PSI. Rear tires 6 - 8 PSI.

CHECK TRANSMISSION OIL LEVEL: See figure 28. Remove pipe plug (A) to check the oil level in the axle housing. Oil should be level with the bottom of the threads. If it is not, add SAE 90 weight transmission oil. Replace the plug and tighten it securely.

If it should be necessary to drain the axle housing, the drain plug is located at (B). Always tighten it securely when replacing to prevent oil leakage.

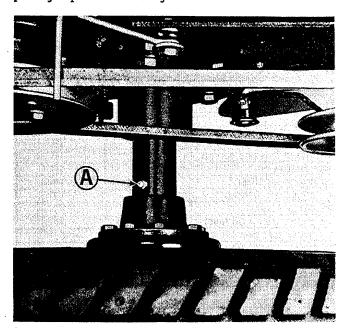
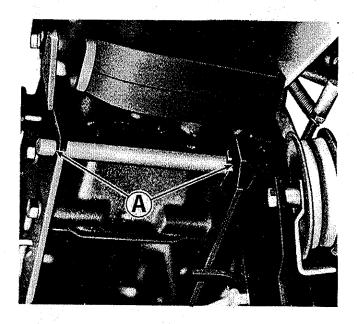
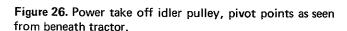
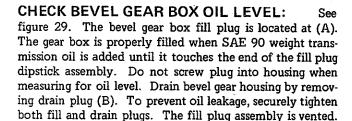


Figure 25. Grease zerk on right rear axle.







CHECK BATTERY WATER LEVEL: See figure 30. Every 25 hours, or more often when operating the tractor in temperatures above 72°F, remove the 6 battery caps (A)

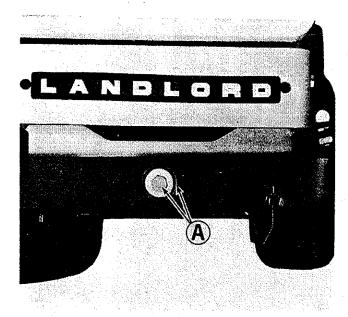


Figure 27. Front of tractor showing axle pivot.

and check the water level in each cell. When the battery is in use, water evaporates from it. Never allow the water level in the battery to get below the top of the plates. Fill the battery to the marking ring (D) with distilled water as shown in figure 30. If distilled water is not available, clean tap water may be used.

#### **EVERY 100 HOURS OR ONCE A YEAR**

#### CLEAN OR REPLACE AIR FILTER ELEMENT:

The engine air cleaner is made up of two types of filters. The foam filter (Figure 21, item B) and a dry filtering element. The foam element should be cleaned and oiled every 25 hours as explained under the Every 25 Hour Maintenance Services. Once a year or every 100 hours, whichever occurs first, the paper element should be removed and cleaned or

#### SCHEDULED MAINTENANCE CHART

		After each cycle of indicated hours				
Service Required	Page	5	25	100		······································
Inspect the tractor and engine	15	•			,	
Check engine crankcase oil level	15	•		······································	<u> </u>	
Clean engine fins and screen *	15	<del>                                     </del>	•	· · · · · · · · · · · · · · · · · · ·		
Change engine oil * (First change 5 Hours)	16			····		
Clean engine air filter *	16					
Lubricate grease fittings *	17					
Check tire pressure	17					
Check transmission oil level	17			······································	<u> </u>	
Check bevel gear box oil level	18					
Check battery water level *	18					
Check or replace air filter element *	18					<del></del>
Replace fuel filter *	19		- · .			
Repack front wheel bearings	19	1				
Clean and reset spark plug	20				· · · · · · · · · · · · · · · · · · ·	
Clean Battery cables	20			•		

<sup>\*</sup>More often under dusty and / or hot weather operating conditions.

See your Briggs and Stratton Instructions for more complete information on servicing the engine.

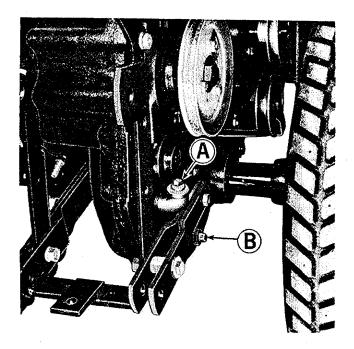


Figure 28. Rear of tractor showing transmission housing.

replaced. Proceed as follows:

- 1. See figure 20. Remove wing nut (B) and cover (C) from the air cleaner.
- See figure 21.. Remove the foam element (B) and clean and oil it as described in the Every 25 Hour Maintenance Service.
- 3. Remove wing nut (C) and remove the paper element from the air cleaner.
- 4. Clean the element by tapping it gently on a flat surface. If it is very dirty, replace the element or wash it in detergent, and water rinse until water remains clear. The element must be dried thoroughly before using.
- 5. See figure 21. Replace the paper element and wing nut (C) and tighten it securely.
- 6. Install the foam element (B) over the paper element as shown in figure 21.

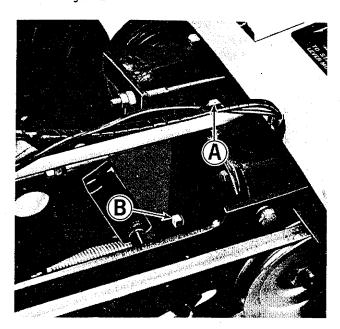


Figure 29. Bevel gear housing located under seat deck.

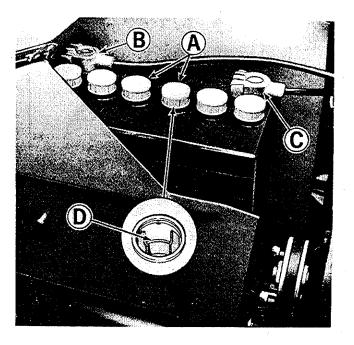


Figure 30. Tractor battery visible when hood is raised.

7. See figure 20. Replace cover (C) and wing nut (B) and tighten securely.

REPLACE FUEL FILTER: See figure 20. Every 100 hours or more often under dirty field conditions, the fuel filter (F) should be replaced. CAUTION: DO NOT REMOVE THE FUEL FILTER WHEN THE ENGINE IS HOT, AS SPILLED GASOLINE MAY IGNITE. USE CARE WHEN REMOVING AND INSTALLING CLAMPS (G), NOT TO SPREAD THEM ANY MORE THAN NECESSARY AS THEY MAY TAKE A SET AND NOT HOLD THE HOSE TO THE FILTER PROPERLY.

In extremely dirty fuel conditions, the fuel filter may become filled with dirt and restrict fuel flow. The filter can be washed in solvent and blown out with compressed air and used.

#### REPACK FRONT WHEEL BEARINGS

Every 100 hours of operation or once a year, the front wheel bearings should be removed and repacked with grease. Proceed as follows:

- 1. Block or jack the front of the tractor so the wheel you are to work on is not supporting the tractor.
- 2. See figure 31. Remove the grease cup (A) by prying off with a screw driver.
- 3. Use an Allen wrench to loosen the set collar (B).
- 4. Remove the set collar (B), washer (E), outer bearing (C), wheel (D), and inner bearing (F). It is best to keep the two bearings separate so you can put them back in their original place. Wash the bearing shaft, bearings, and wheel housing with a suitable solvent and wipe dry. Inspect the seal of the inner wheel. Replace it if it is damaged. NOTE: IT IS EXTREMELY IMPORTANT THAT THE BEARINGS AND GREASE THAT IS PACKED IN THEM BE KEPT CLEAN.
- 5. Using the palm of your hand, force a good quality wheel bearing grease into the bearings. Place a coating of grease on the seal where it turns in the hub.
- 6. See figure 31. Replace the inner bearing and slide the wheel on the axle.

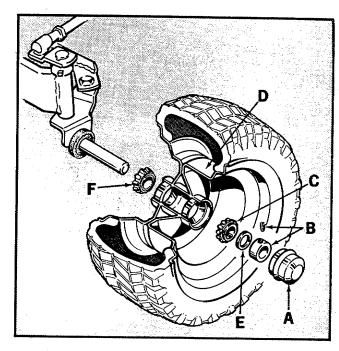


Figure 31. Left front spindle and axle assembly.

- 7. Replace the outer bearing, washer and set collar. Spin the wheel slowly and press in on the set collar to seat the bearing. Be sure the seal on the inside of the wheel is properly seated. Hold in on the set collar and tighten the Allen screw securely.
- 8. Replace the grease cup.

CLEAN AND REPLACE SPARK PLUG: See figure 32. Every 100 hours the spark plug should be removed, cleaned,

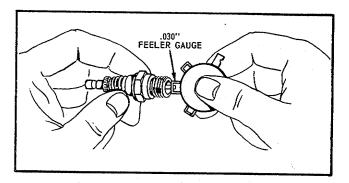


Figure 32. Setting spark plug gap.

and the gap reset at .030". When the spark plug is worn out, replace it with AC GC 46, Autolight A 71 or Champion J-8.

CAUTION: BLAST CLEANING OF SPARK PLUGS IN MACHINES THAT USE ABRASIVE GRIT IS NOT RECOMMENDED. SPARK PLUGS SHOULD BE CLEANED BY SCRAPING OR WIRE BRUSHING, AND WASHING WITH A COMMERCIAL SOLVENT OR GASOLINE.

CLEAN BATTERY CABLES: See figure 30. Every 100 hours or once a year the battery cables (B) and (C) should be removed and cleaned. CAUTION: ALWAYS REMOVE THE NEGATIVE "GROUND CABLE" (C) FIRST AND REPLACE IT LAST. Clean the battery with soap and water to remove all dirt, oil, and corrosion from the battery surface. Do not allow foreign material or cleaning solution to get inside the battery. Clean the terminals and battery clamps with a wire brush. Replace and tighten securely. After tightening coat the terminals and clamps liberally with a coat of grease or vaseline to inhibit corrosion.

# **ACCESSORIES**

There are many optional accessories available for your Landlord tractor through your Simplicity dealer. They will make your tractor perform better, or easier to operate when using various attachments. For recommended accessories to use, when your tractor is to be operated with an attachment, see the Operation Chart on page 7. See your Simplicity dealer if you wish to purchase any of the following:

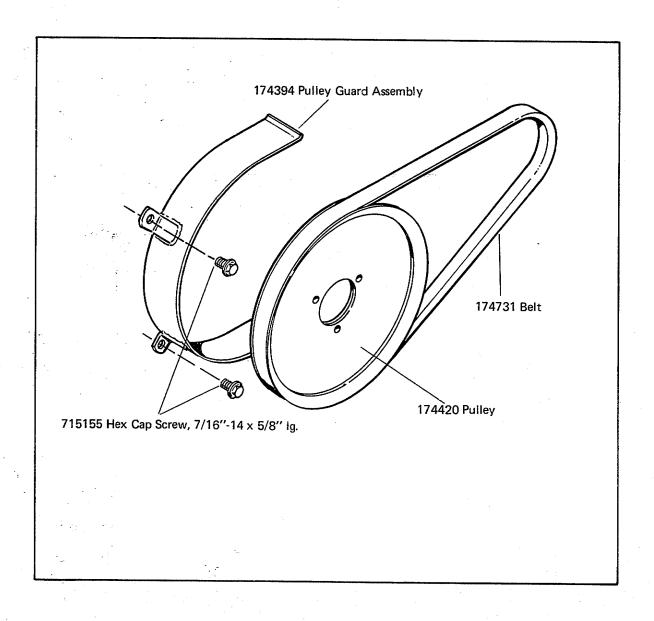
BALL HITCH-REAR
FRONT LIGHT KIT
REAR LIGHT KIT
HUB CAPS (Set of 4)
WHEEL WEIGHTS-REAR
WHEEL WEIGHTS-FRONT
POWER LIFT KIT
DUAL LIFT LEVER
REAR LIFT KIT
TIRE CHAINS
CUSTOMER TOOL KIT (Wrenches, pliers & screwdrivers)
HOUR METER

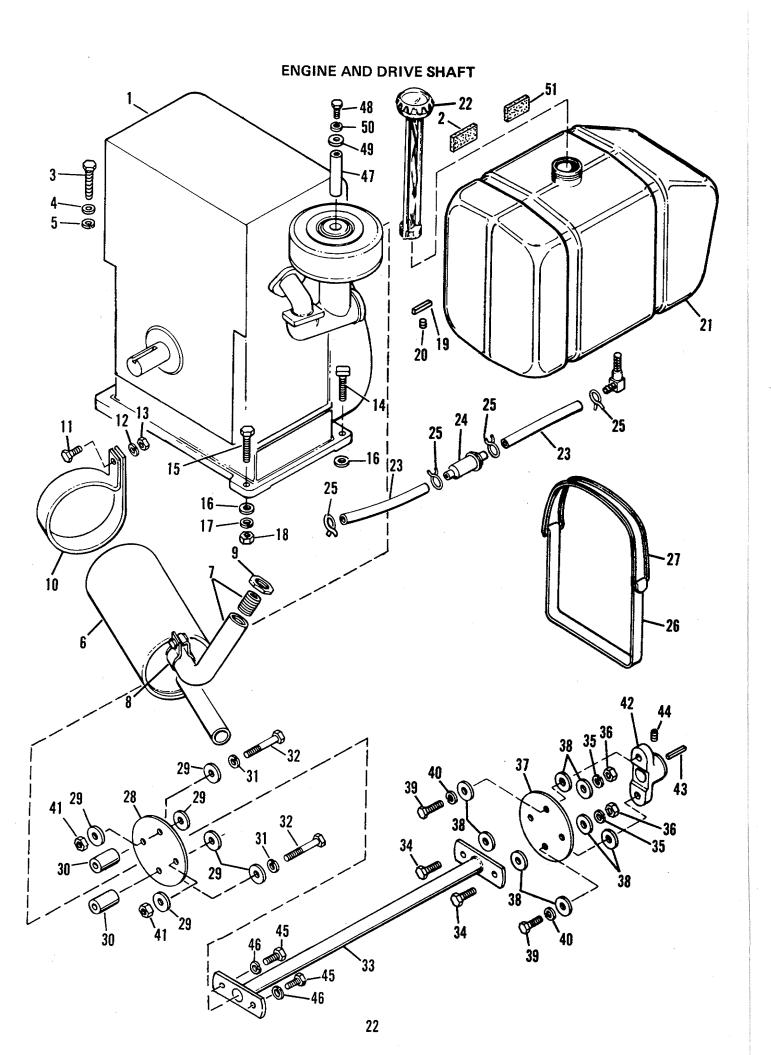
# **ATTACHMENTS**

To make your Landlord tractor most useful to you, Simplicity manufactures a complete line of attachments for it. They are available through your Simplicity dealer. Contact him if you wish to purchase any of the following:

**42" ROTARY MOWER** 46" SICKLE BAR MOWER **VACUUM COLLECTOR** CART COVER (High capacity) CART COVER (Low profile) ROVING NOZZLE FOR VACUUM COLLECTORS CART - DUMP 1000 POUND CAPACITY **CART-DUMP 400 POUND CAPACITY** 38" LAWN REVITALIZER (Thatcher, aerator) 36" ROTARY SNOW THROWER 46" SNOW PLOW AND DOZER BLADE 42" SNOW PLOW AND DOZER BLADE **SNOW CAB** 36" ROTARY TILLER & 10" TINE EXT. 10" PLOW **CULTIVATOR** SPRING TOOTH HARROW 42" GRADER BLADE

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE





#### **ENGINE AND DRIVE SHAFT**

				ENGINE A
	Ref. No.	Part No.	Qty. Req.	Description
	1		1	Engine
	2	173335	1	Pad, Fuel Tank
	3	715068	2	Hex Capscrew, 5/16"-18 x 2"
	4	719002	2	Plain Washer, 5/16"
	5	720001	2	Lockwasher, 5/16"
	6	170456	1	Muffler, Exhaust
	7	172195	ī	Elbow & Nipple Assembly
	8	172061	ī	Muffler Clamp
	9	154378	i	Lock Nut
	10	171880	i	Strap, Muffler
	11	705012	l	Hex Capscrew, 5/16"-18 N.C.
		700012		x 5/8"
	12	720001	1	Lockwasher, 5/16"
	13	717001	1	Full Hex Nut, 5/16"-18 N.C.
	14	172455	1	
	17	172433	•	Rec't. Head Screw, 3/8"-16 N.C. x 1-5/16"
	15	705009	3	
	13	703009	٦	Hex Capscrew, 3/8"-16 N.C. x 1-1/2"
	16	719001	4	1
	17	720002	4	Plain Washer, 3/8" Std.
	18	717003	4	Lockwasher, 3/8"
	19	171241	1	Full Hex Nut, 3/8"-16 N.C.
	20	713504	1	Key
Ì	20	713304	I	Cup Pt. Socket Head Set
	21	171115	,	Screw, 5/16"-18 N.C. x 3/8"
	22	171115	1	Tank, Fuel
	23		1	Cap, Fuel Tank
		173204	2	Hose, Fuel, Flexible
ı	24	173206	1	Fuel Filter
ı	25	154372	4	Clamp, Hose
	26	171330	2	Strap, Tank
	27	172744	2	Strap, Fuel Tank
1	28	173026	1	Coupling
ı	29	157424	8	Washer, Special
ı	30	8161056	2	Bearing, Pivot Block
١	31	720002	2	Lockwasher, 3/8"
I	32	715036	2	Hex Capscrew, 3/8"-16 x 2-1/4"
	33	172328	1	Shaft Assy., Drive
	34	172677	2	Hex Capscrew, 3/8"-16 x 1-1/8"
۱	35	720002	2	Lockwasher, 3/8"
I	36	717003	2	Full Hex Nut, 3/8"-16
I	37	173026	1	Coupling
I	38	157424	8	Washer, Special
I	39	172677	2	Hex Capscrew, 3/8"-16 N.C.
ļ	40	700000	ا ر	x 1-1/8"
	40	720002	2	Lockwasher, 3/8"
-	41	717003	2	Full Hex Nut, 3/8"-16 N.C.
l	42	172264	1	Flange, Drive Shaft
	43	157427	1	Key, Drive Shaft
	44	715049	1	Cup Pt. Socket Head Set
	4.5	150/55		Screw, 3/8"-24 N.F. x 3/8"
	45	172677	2	Hex Capscrew, 3/8"-16 N.C.
	ا رړ	F00000		x 1-1/8"
1	46	720002	2	Lockwasher, 3/8"
	47	157126	1	Air Cleaner Spacer
1	48	715018	1	Hex Capscrew, 1/4"-20 N.C.
-	4.	B1655	.	x 5/8"
1	49	719006	1	Plain Washer, 1/4"
İ	50	720003	1	Lockwasher, 1/4"
L	51	106582	1	Gasket, Felt

#### **DECALS**

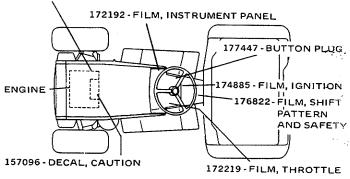
178478-FILM, LANDLORD 178477-FILM, LANDLORD

172816 - FILM, BRAKE 174352 - PLATE, SERIAL NO.

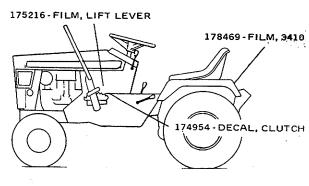
#### **FRONT VIEW**

124039 - FILM, SIMPLICITY

172707 - FILM, OIL LEVEL INST.

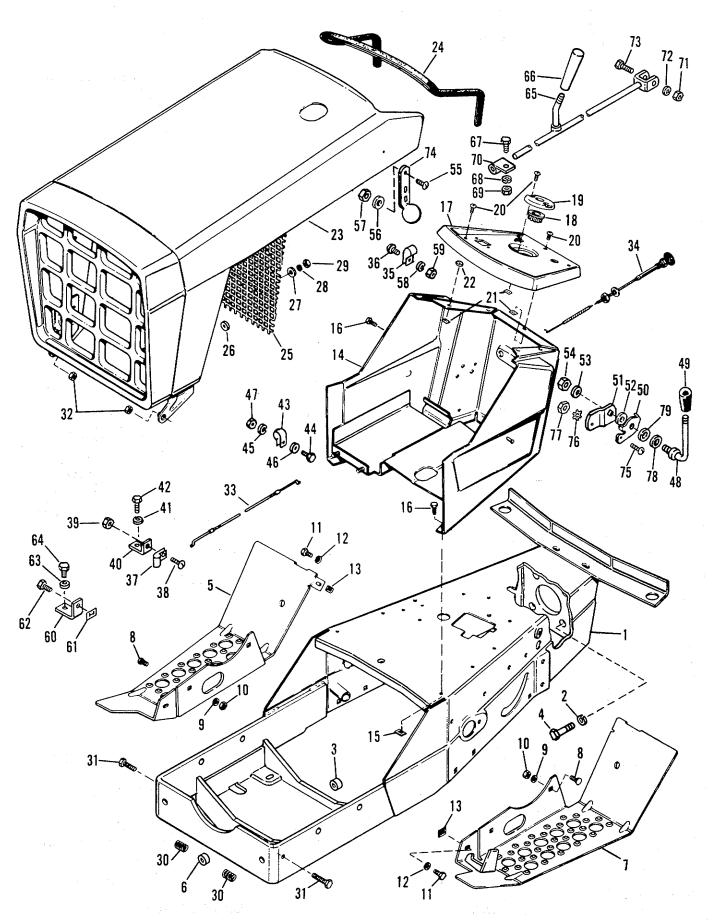


#### **TOP VIEW**



**LEFT SIDE VIEW** 

FRAME, HOOD, GRILL & INSTRUMENT PANEL

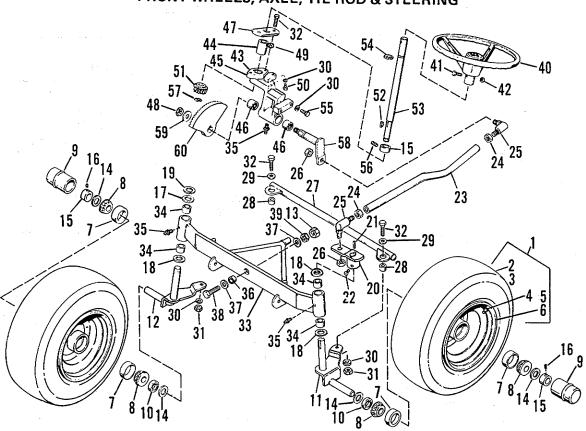


# FRAME, HOOD, GRILL & INSTRUMENT PANEL

	<u> </u>	τ	
Ref.	1	Qty.	
No.	Part No.	Req.	Description
ļ	<u> </u>		<u> </u>
1	174095	1	Frame Assembly
2	720006	4	Lockwasher, 7/16"
3	154289	1	Bushing
4	705039	4	Hex Capscrew, 7/16''-14
		_	N.C. x 1-1/2"
5	171271	1	Foot Rest, R.H.
6	174662	1	Bushing
7	176628	1	
8	702015	6	Foot Rest, L.H.
٥	702015	6	Carriage Bolt, 5/16"-16
_	700003	,	N.C. x 3/4"
9	720001	6	Lockwasher, 5/16"
10	717001	6	Full Hex Nut, 5/16"-18 N.C.
11	705017	2	Hex Capscrew, 5/16"-18
ا ۱			N.C. x 3/4"
12	720001	2	Lockwasher, 5/16''
13	718024	2	Nut, Tinnerman, 5/16"-18
	:		N.C.
14	171266	1	Dash Assembly
15	718038	8	Nut, Tinnerman
16	714031	11	Hex Head Self Tapping
			Screw, No. 14 AB x 3/4"
17	171231	1	Panel, Instrument
18	157077	1	Bushing, Steering
19	172008	ì	Plate, Steering Adj.
20	711002	6	Round Head Phillips Screw,
20	711002	٠	1/4"-20 N.C. x 1/2"
21	718043	6	
22	719043	4	Nut, Tinnerman, 1/4"-20 N.C.
	1	_	Plain Washer
23	171226	1	Grille & Hood Assembly
24	172935	1	Molding, Hood
25	171232	1	Screen, Grille
26	171804	2	Washer
27	172742	2	Washer
28	721003	4	Lockwasher, Shakeproof
			No. 10
29	717023	4	Full Hex Nut, No. 10-24 N.F.
30	8191047	2	Spring
31	705009	2	Hex Capscrew, 3/8"-16
			N.C. x 1-1/2"
32	717510	2	Hex Lock Nut, Center,
			3/8"-16 N.C.
33	171355	1	Throttle Control
34	171334	i	Choke Control
35	158475	i	Clip, Bowden Wire
36	714005	1	Self Tapping Rd. Hd. Screw,
~~	,1-1003	-	No. 10-24 N.C. x 1/2"
37	158475	٠, ١	
		1	Clip, Bowden Wire
38	710004	1	Rd. Hd. Machine Screw,
70	717000	,	No. 10-32 N.F. x 3/8"
39	717007	1	Full Hex Nut, No. 10-32 N.F.

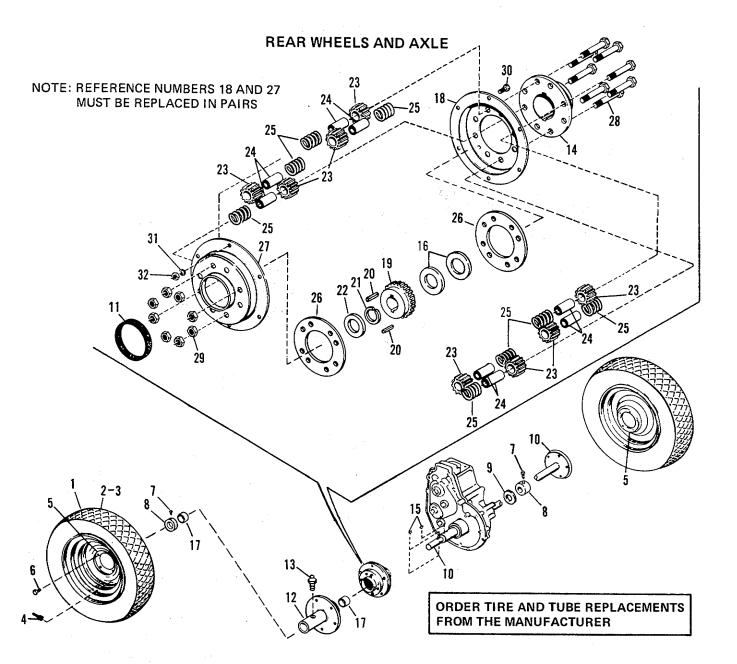
1		T	T	T
	Ref.		Qty.	
	No.	Part No.	Req.	Description
	40	157315	1	Proches (Thursday C. 1.)
	41	720003	1	Bracket, Throttle Cable
	42	720003	1	Lockwasher, 1/4"
i	42	/14021	1	Self Tapping Rec. Hex Hd.
	43	122156		Screw, 1/4"-20 N.C. x 5/8"
	44	122186	1	Clamp
1	44	705015	1	Hex Capscrew, 1/4"-20
	45	700007	١,	N.C. x 5/8"
	46	720003 719006	1	Lockwasher, 1/4"
1	47		1	Plain Washer, 1/4" Std.
١	48	717005	1	Full Hex Nut, 1/4"-20 N.C.
ļ	49	172040		Throttle Handle
۱	50	172038	1	Knob
١	50 51	171848	1	Stop Throttle
ļ		158424	1	Arm Throttle
1	52	159107	1	Washer
ı	53	721602	1	Washer Lock Dished Type,
ı	E.A	B18510		3/8"
l	54	717510	1	Full Lock Hex Nut, 3/8"-16
			_	N.C.
l	55	711003	2	Phillips Truss Head Screw,
ļ	<i></i>	373004	_	No. 10-32 x 1/2"
ı	56	171804	2	Washer
١	57	717507	2	Gripco Lock Nut, No. 10-32
ı	58	720007	2	Lockwasher, No. 12
١	59	717023	2	Full Hex Nut, No. 10-24
ı	60	158611	1	Bracket, Pulley Guard
l	61	718043	1	Nut, Tinnerman
l	62	715057	1	Hex Capscrew, 1/4"-20 x 3/4"
١	63	719007	1	Plain Washer, 3/16"
	64	714032	l	Hex Head Screw, No. 14
ı	65	171559	1	x 1-1/4"
ı	66	164180	1 1	Shifter Rod Assembly
	67	715026	1	Handle
	٥,	713020	1	Hex Capscrew, 5/16"-18 x 1-1/2"
	68	720001	1	1
l	69	717001	ì	Lockwasher, 5/16"
l	70	157020	1	Full Hex Nut, 5/16"-18
	71	717005	1	Shift Rod Guide Assembly Full Hex Nut, 1/4"-20
	72	720003	1	Lockwasher, 1/4"
1	73	715018	1	
Ì	′	713010	1	Hex Capscrew, 1/4"-20 x 5/8"
l	74	171600	2	Hood Strap
	75	710002	ī	Round Head Machine
			-	Screw, No. 10-32 x 1/2"
	76	721003	1	Lockwasher, Shakeproof
١			*	No. 10
l	77	717007	1	Full Hex Nut, No. 10-32
	78	101025	î	Washer
	79	156116	1	Washer
1	1		-	17 000004

# FRONT WHEELS, AXLE, TIE ROD & STEERING



Ref.		Qty.	
No.	Part No.	Req.	Description
1	171483	2	Wheel & Tire Assembly
2	153037	2	Tire
3	153038	2	Tube
4	171270	2	Valve Stem & Cap
5	171484	2 2	Wheel-Sub Assembly
6	171485	2	Wheel (Front)
7	154393	4	Bearing, Cup
8	154486	4	Bearing, Cone (Without Seal)
9	154487	2	Hub Cap
10	170168	2	Seal
11	171774	1	Spindle Assy., L.H.
12	157494	1	Spindle Assy., R.H.
13	717017	1	Hex Jam Nut, 1/2"-13
14	171375	4	Spacer
15	8021010	3	Collar, Set
16	713503	2	Set Screw, 5/16"-18 x 5/16"
17	8061012	1	Washer (Use Beneath Snap Ring)
18	108181	3	Washer
19	157286	1	Ring, Retaining
20	170998	1	Arm Assy., Strg. L.H.
21	157427	2	Key
22	713006	2	Set Screw, 5/16"-18 x 1/2"
23	171830	1	Rod, Tie
24	717016	2	Hex Jam Nut, 1/2"-20 N.F.
25	164272	2	Joint, Ball
26	717528	2	Hex Nut, Jam Lock, 1/2"-20
27	157499	1	Link Assy., Drag
28	154177	2	Spacer
29	719001	2	Washer, Plain, 3/8"
30	720002	5	Lockwasher, 3/8"

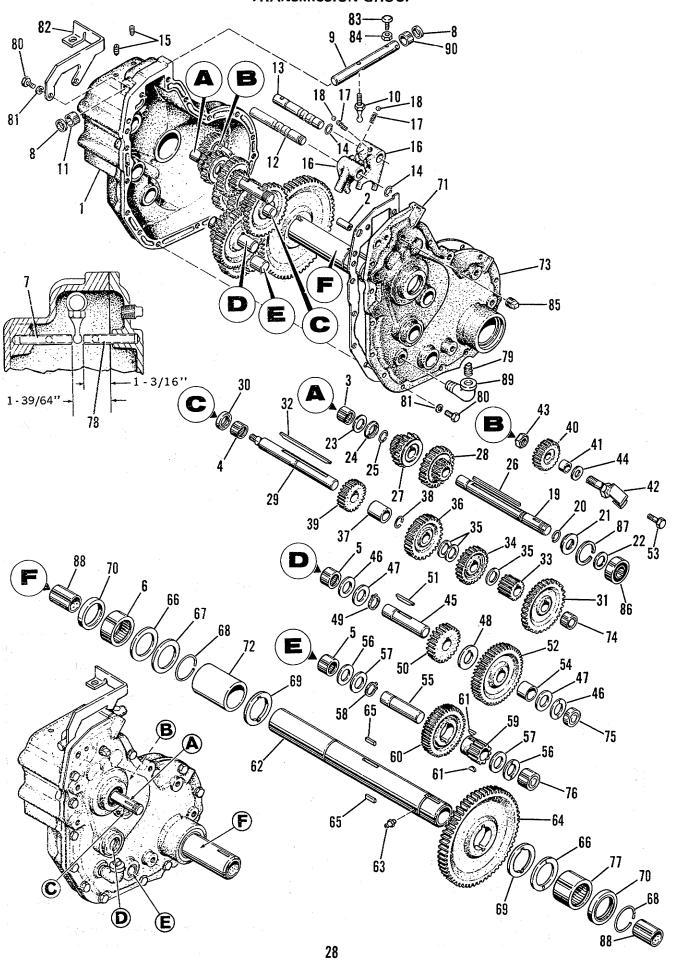
	0		
Ref. No.	Part No.	Qty. Req.	Description
31	717003	2	Full Hex Nut, 3/8"-16 N.C.
32	705016	4	Hex Capscrew, 3/8"-16 x 1-1/4"
33	157616	1	Axle Assy., Front
34	154289	4	Bushing
35	727001	3	Fitting, Grease
36	157618	1	Spacer
37	719004	2	Plain Washer; 1/2"
38	715159	1	Hex Capscrew
39	718068	1	Nut, Toplo, 1/2"-13
40	171196	1	Steering Wheel
41	715046	1	Hex Capscrew, 5/16"-18 x 1-1/4"
42	718050	1	Nut, Flange, Lock 5/16-18
43	170960	1	Steering Bracket, Casting
44	170992	1	Bushing, Steering
45	171832	1	Casting and Bearing
46	154258	2	Bearing, Needle
47	171000	1	Plate, Steering
48	717519	1	Hex Lock Nut, 7/16"-14 N.C.
49	717524	2	Hex Jam Nut, 3/8"-16
50	715030	1	Hex Capscrew, 3/8"-16 x 3/4"
51	170988	1	Pinion, 15 T, Bevel
52	725002	1	Key, Woodruff
53	171020	1	Shaft, Steering
54	154264	1	Ring, Retaining
55	705031	2	Hex Capscrew, 3/8"-16 x 7/8"
56	713502	1	Set Screw, 5/16"-18 N.C. x 1/4"
57	1602155	1	"E" Ring
58	170999	1	Arm Assy. Steering
59	719003	1	Plain Washer, 7/16"
60	170987	1	Gear, 23 T, Bevel



Ref. No.	Part No.	Qty. Req.	Description
1	173431	2	Wheel & Tire Assy.
2	157024	2	Tire
3	157602	2	Tube
4	172353	2	Valve Stem
5	173430	2	Wheel Drive
6	8261100	10	Hub Bolt
7	713002	4	Set Screw, 5/16" - 18 x 3/8"
8	154065	2	Axle Collar
9	105050	1	Washer
10	177900	1	Rear Axle
11	121190	1	Differential Cover Seal
12	176945	1	R.H. Wheel Hub Assy.
13	727004	1	Grease Fitting
14	164217	1	Differential Carrier
15	157120	2	Drive Key
16	171515	2	Axle Washer
17	153068	2	Bearing

Ref. No.	Part No.	Qty. Req.	Description
18 19	171853 177041	1	Differential Cover Differential Gear
20	725501	2	Hi-Pro Key
21	154291	1	Retaining Ring
22	154277	1	Axle Washer
23	158579	8	Differential Pinion
24	121083	8	Differential Pinion Spindle
25	162085	8	Spring
26	171517	2	Ring Spacer
27	171854	1	Differential Cover
28	715043	8	Hex Capscrew, 3/8" - 16 x 2-1/2"
29	717510	8	Full Hex Lock Nut, 3/8" - 16
30	705015	6	Hex Capscrew, 1/4" - 20 x 5/8"
31	720003	6	Lockwasher, 1/4"
32	717005	6	Full Hex Nut, 1/4" - 20

#### **TRANSMISSION GROUP**

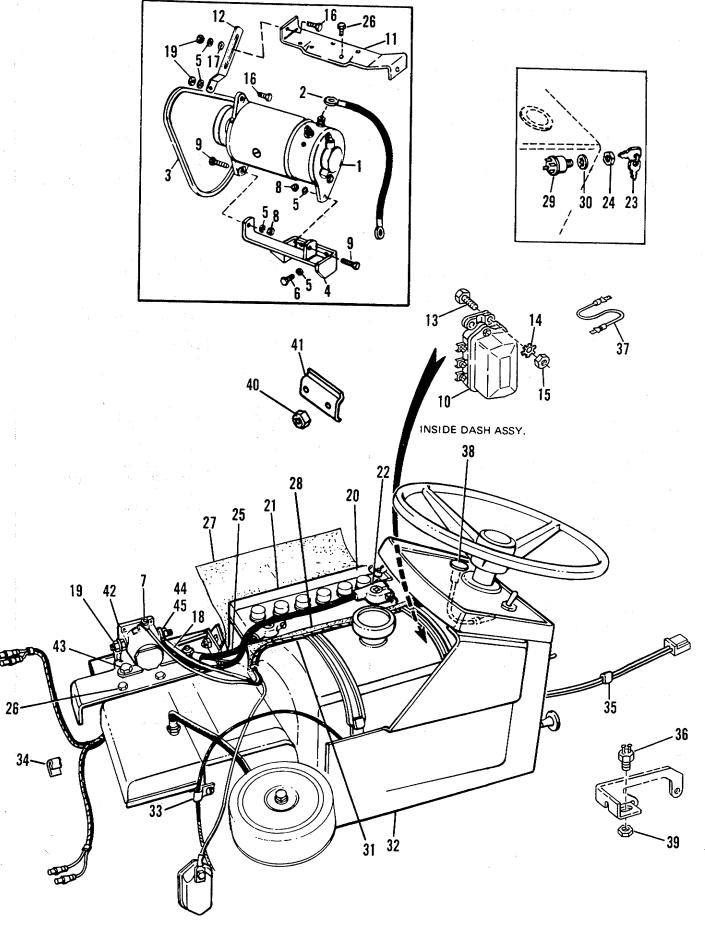


#### TRANSMISSION GROUP

Ref. No.	Part No.	Qty. Req.	Description
1	157516	1	Case, Gear Assy., Complete
	107010	•	w/bearings & dowel pins
	•		(Includes 1 thru 7)
2	723007	2	Roll Pin
3	154257	1	Needle Bearing
4	154258	1	Needle Bearing
5	154259	2	Needle Bearing
6	157519	1	Needle Bearing
7	154538	1	Roll Pin
8	157619	2	Oil Seal
9	164250	1	Shift Rod
10	172779	1	Shift Stem
11	121084	2	Spacer
12	154067	1	Shifter Shaft Rev., Med.
13	154068	1	Shifter Shaft High, Low
14	8061048	2	Retaining Ring
15	715019	2	Set Screw, Hollow Head, Cone
	ļ		Point, 5/16"-18 x 1/2"
16	154069	2	Shift Fork
17	154323	2	Spring
18	154262	2	Shift Lock Ball
19	174338	1	Pulley Shaft
20	118134	1	Retaining Ring
21	154462	1	Washer
22	108472	1	Washer
23	172982	1	Washer
24	172981	1	Washer
25	154264	1	Retaining Ring
26	164294	1	Key
27	154072	1	Pinion Assembly Rev. II
28	154075	1	Pinion Assembly, I and II
29	157290	1	Shaft, 1st Intm.
30	154263	1	Oil Seal
31	154078	1	Driven I, Gear
32	154354	1	Key
33	154079	1	Pinion, 1st Intm.
34	154080	1	Pinion, Driven, III
35	8061012	3	Washer
36	154081	1	Driven II Gear
37	154082	1	Spacer
38	154264	1	Retaining Ring
39	174228	1	Pinion Rev & IV
40	154087	1	Reverse Gear
41	154084	1	Rev. Gear Spacer
42	154352	1	Rev. Gear Pin Assembly
43	717516	1	Lock Nut, 1/2"-20 N.F.
44	154325	1	Washer

Ref. No.	Part No.	Qty. Req.	Description
45	154086	1	Shaft, 2nd Intm.
46	172979	2	Washer
47	172978	2	Washer
48	154038	ì	Washer
49	154266	1	Retaining Ring
50	164062	î	Pinion, 2nd Intm.
51	154267	i	Key
52	154089	ì	Gear, 2nd Intm.
53	705016	ī	Hex Capscrew, 3/8"-16 x 1-1/4"
54	154090	1	Spacer
55	154091	1	Shaft, 3rd Intm.
56	172979	2	Washer
57	172978	2	Washer
58	154266	1	Retaining Ring
59	154092	ì	Pinion, 3rd Intm.
60	164051	l	Gear, 3rd Intm.
61	725002	2	Key Woodruff
62	164222	1	Axle Tube w/bushing
63	727002	î	Grease Fitting
64	154095	ì	Drive Gear
65	154096	2	Key
66	172977	2	Washer
67	154097	1	Washer
68	154268	2	Snap Ring
69	154130	2	Axle Tube Washer
70	154269	2	Seal
71	164234	l	Gear Case Gasket
72	154098	1	Axle Tube Spacer
73	164226	î	Gear Case Cover, Complete
'`	101220	-	w/bearings
74	154257	1	Needle Bearing
75	154271	ì	Needle Bearing
76	154259	1	Needle Bearing
77	157520	ì	Needle Bearing
78	154537	î	Roll Pin Assembly
79	726003	2	Pipe Plug, 3/8"
80	705007	14	Hex Capscrew, 5/16"-18 x 1"
81	720001	14	Lockwasher, 5/16"
82	164251	1	Switch Support
83	172241	1	Carriage Bolt, 5/16"-18 x 1"
84	717011	î	Hex Jam Nut, 5/16"-18
85	726003	ì	Pipe Plug, 3/8"
86	108202	1	Ball Bearing
87	164064	î	Retaining Ring
88	164224	2	Bushing
89	728501	1	Elbow, 3/8" x 90
		٦.	

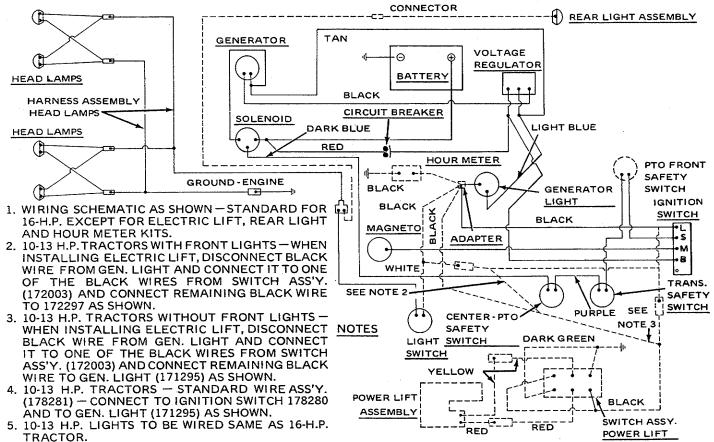
### **ELECTRIC STARTER-GENERATOR SYSTEM**



#### **ELECTRIC STARTER – GENERATOR SYSTEM**

Ref. No.	Part No.	Qty. Req.	Description		Ref. No.	Part No.	Qty. Req.	. Description
1	122236**	1	Motor-Generator		26	715090	3	Screw Hex Thread Forming,
2	122213	1	Generator Start Cable			į		1/4"-20 x 1/2"
3	157524	1	"V" Belt		27	122142	1	Battery Insulation
4	157654	1	Support Assembly		28	172119	1	Fuel Tank Insulation
5	720001	10	Lockwasher, 5/16"		29	178280	1	Starter Switch
6	705017	4	Hex Capscrew, 5/16"-18x3/4"		30	721505	1	Lockwasher, 5/8" Internal
7	717525	2	Elastic Stop Nut, 5/16"-18		31	178281	1	Harness Assembly
8	717001	5	Full Hex Nut, 5/16''-18		32	172175	1	Grommet
9	705019	2	Hex Capscrew, 5/16"-18x1-1/4"		33	106786	1	Clamp
10	122193**	1	Voltage Regulator		34	165074	1	Speed Clip
11	176931	1	Bracket		35	165073	1	Speed Clip
12	157102	1	Arm, Belt Tightener		36	177522	2	Switch
13	705030	3	Hex Capscrew, 1/4"-20 x 3/4"		37	122234	1	Nut, Special
14	705007	2	Hex Capscrew, 5/16"-18 x 1"		38	166174	1	Switch Support
15	717005	5	Full Hex Nut, 1/4"-20		39	171295	1	Indicator Lamp Assembly
16	715048	2	Hex Capscrew, 5/16"-18 x 3/4"	1	40	172163	1	Circuit Breaker
17	719002	1	Plain Washer, 5/16"		41	717001	4	Full Hex Nut, 5/16"-18
18	171225	1	Battery Clamp		42	122216	1	Solenoid
19	721002	3	Lockwasher, 1/4" External		43	122203	1	Key and Ring Assembly
20	172270	1	Battery		44	717007	1	Full Hex Nut, No. 10-32
21	172277	1	Film, Battery		45	721003	1	Lockwasher, No. 10 External
22	171805	1	Cable (Battery to Solenoid)		46	718067	2	Nut, Pal 9/16"-18
23	122195	1	Wire Clamp (Generator Cable)		47	154026	1	Washer
24	714005	1	Rd. Hd. Screw, No. 10-24x1/2"		48	719002	1	Flat Washer
25	171811	1	Cable (Battery to Ground)		49	720003	2	Lockwasher, 1/4"

\*\* FOR SERVICE CONTACT YOUR LOCAL UNITED MOTOR SERVICE DEALER (DELCO - REMY).



ADAPTOR. THEN CONNECT REMAINING END OF BLACK WIRE (172997) TO ONE TERMINAL ON HOUR METER (172993). CONNECT ONE END OF BLACK WIRE (172998) TO REMAINING TERMINAL ON HOUR METER (172993) AND OPPOSITE END TO INSTRUMENT PANEL AS SHOWN.

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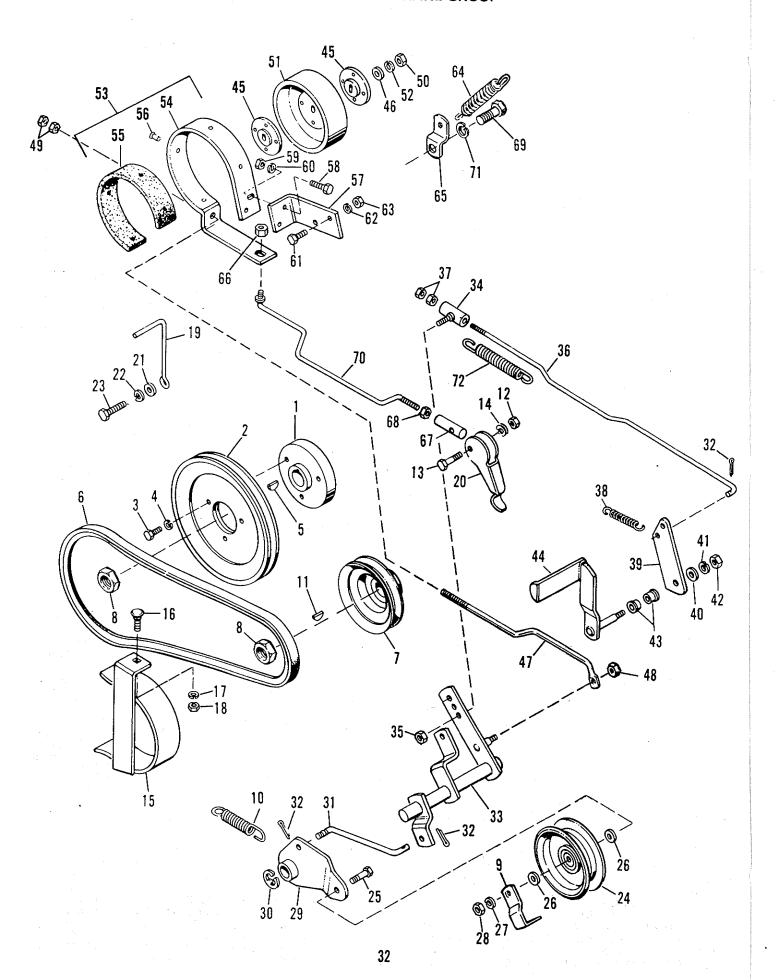
 WHEN INSTALLING HOUR METER (172993) — DIS-CONNECT BLACK WIRE FROM GEN. LIGHT AND

ATTACH 2-WAY ADAPTOR (172996). RECONNECT BLACK WIRE TO ONE TERMINAL OF ADAPTOR

(172996) AND CONNECT ONE END OF BLACK WIRE

(172997) TO OTHER TERMINAL OF GEN. LIGHT

### **CLUTCH AND BRAKE GROUP**

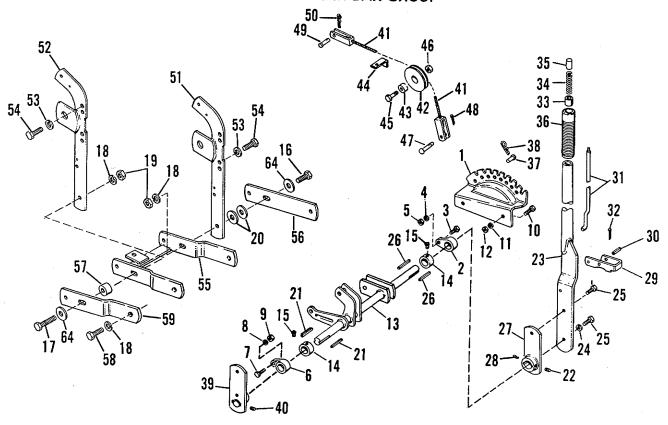


#### **CLUTCH AND BRAKE GROUP**

Ref.		Qty.	
No.	Part No.	Req.	Description
1	174336	1	Hub Pulley
2	174356	1	Pulley Drive
3	705001	3	Hex Capscrew, 5/16"-18 x 7/8"
4	720001	3	Lockwasher, 5/16"
5	725003	1	Key, Woodruff, No. 9
6	174364	1	"V" Belt
7	174359	1	Pulley
8	717517	2	Hex Jam Nut, 3/4"-16
9	106717	1	Belt Guide
10	121037	1	Spring
11	725003	1	Key, Woodruff, No. 9
12	717509	1	Full Hex Lock Nut, 1/4"-20
13	715062	1	Hex Capscrew, 1/4"-20 x 1-1/4"
14	721702	1	Double Lockwasher, 1/4"
15	174424	1	Guard Belt Assembly
16	702003	1	Carriage Bolt, 3/8"-16 x 3/4"
17	720002	1	Lockwasher, 3/8"
18	717003	1	Full Hex Nut, 3/8"-16
19	106707	1	Belt Stop
20	172108	1	Parking Brake Lever
21	719001	1	Plain Washer, 3/8''
22	720002	1	Lockwasher, 3/8''
23	705005	1	Hex Capscrew, 3/8"-16 x 1"
24	174497	1	Idler Pulley
25	705009	1	Hex Capscrew, 3/8"-16 x 1-1/2"
26	719001	2	Plain Washer, 3/8"
27	720002	1	Lockwasher, 3/8"
28	717003	1	Full Hex Nut, 3/8''-16
29	173861	1	Idler Lever Assembly
30	1602155	1	Retaining Ring
31	164088	1	Clutch Link
32	722001	3	Cotter Pin, 3/32" x 3/4"
33	172724	1	Pivot Lever Assembly
34	164094	1	Rod Guide Assembly
35	717511	1	Full Hex Lock Nut, 5/16"-18
36	174105	1	Brake & Clutch Rod Assy.

Ref.		Qty.	
No.	Part No.	Req.	Description
		rtoq.	Bosciption
37	717001	2	Full Hex Nut, 5/16"-18
38	121037	1	Spring
39	157300	1	Pedal Foot Arm
40	719001	1	Plain Washer, 3/8''
41	720002	1	Lockwasher, 3/8''
42	717003	1	Full Hex Nut, 3/8''-16
43	108419	2	Bushing
44	171178	1	Foot Pedal Assembly
45	158196	2	Special Washer
46	719001	1	Plain Washer, 3/8''
47	172722	1	Brake Rod
48	717511	1	Full Hex Nut, 5/16"-18
49	717003	2	Full Hex Nut, 3/8''-16
50	717022	1	Full Hex Nut, 7/16"-14
51	157282	1	Brake Drum
52	720006	1	Lockwasher, 7/16"
53	171497	1	Brake Band & Lining Assy.
54	171482	1	Brake Band
55	154133	1	Brake Lining
56	724501	4	Rivet No. 7 x 5/16"
57	164113	1	Brake Band Bracket
58	705005	2	Hex Capscrew, 3/8"-16 x 1"
59	717003	2	Full Hex Nut, 3/8"-16
60	720002	2	Lockwasher, 3/8"
61	705030	2	Hex Capscrew, 1/4"-20 x 3/4"
62	720003	- 2	Lockwasher, 1/4"
63	717005	2	Full Hex Nut, 1/4"-20
64	174896	1	Tension Spring
65	174893	1	Spring Clip
66	717001	1	Full Hex Nut, 5/16"-18
67	171994	1	Rod End
68	717508	1	Full Hex Lock Nut, 5/16"-18
69	705042	1	Hex Capscrew, 7/16"-14 x 1-1/4"
70	174708	1	Parking Brake Rod Assembly
71	720006	1	Lockwasher, 7/16"
72	121037	1	Spring

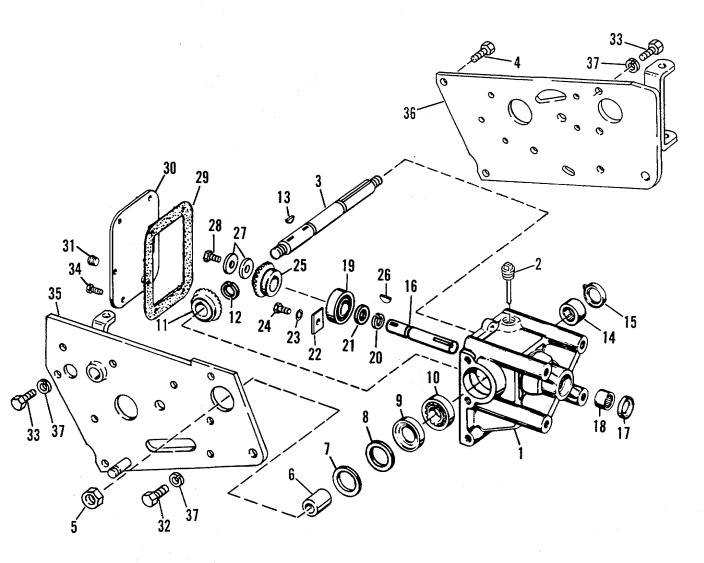
# REAR LIFT DRAW BAR GROUP



Ref. No.	Part No.	Qty. Req.	Description
1	171599	1	Lift Lever Quadrant
2	170975	1	Lift Lever Bearing
3	715046	1	Hex Capscrew, 5/16"-18 x 1-1/4"
4	720001	1	Lockwasher, 5/16"
5	717001	1	Full Hex Nut, 5/16"-18
6	170975	1	Lift Lever Bearing
7	715046	1	Hex Capscrew, 5/16"-18 x 1-1/4"
8	720001	1	Lockwasher, 5/16"
9	717001	1	Hex Nut, 5/16"-18
10	705004	2	Hex Capscrew, 3/8"-16 x 3/4"
11	720002	2	Lockwasher, 3/8"
12	717003	2	Full Hex Nut, 3/8"
13	174111	1	Lift Shaft Assembly
14	157624	2	Set Collar
15	713002	2	Set Screw Sq. Hd., 5/16"-18 x 3/8"
16	705039	1	Hex Capscrew, 7/16"-14 x 1-1/2"
17	705047	1	Hex Capscrew, 7/16"-14 x 1-3/4"
18	720006	3	Lockwasher, 7/16"
19	717022	2	Full Hex Nut, 7/16"-14
20	719002	4	Plain Washer, 5/16"
21	157652	2	Key
22	713502	1	Set Screw, 5/16"-18 x 1/4"
23	171589	1	Lift Lever Assembly
24	720002	1	Lockwasher, 3/8"
25	715120	2	Hex Capscrew, 3/8"-16 x 1"
26	157652	2	Key
27	171593	1	Lift Lever Assy. Inner Section
28	713502	1	Set Screw, 5/16"-18 x 1/4"
29	173039	1	Lift Lever Latch
30	723018	1	Roll Pin, 3/8" x 1-1/4"

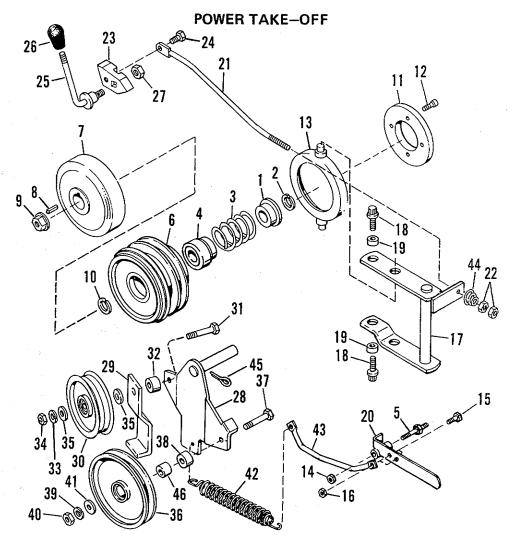
Ref.		<u> </u>	
No.	Part No.	Qty.	
140.	Part No.	Req.	Description
31	170983	1	Latch Rod
32	722001	li	Cotter Pin, 3/32" x 3/4"
33	154226	1	Spacer
34	152006	1	Spring
35	154227	1	Thumb Button
36	156209	1	Handle Grip
37	153058	1	Pin
38	8161045	1	Spring Clip
39	157625	1	Front Lift Lever Assembly
40	713502	1	Set Screw, 5/16"-18 x 1/4"
41	174085	1	Cable Assembly, Lift
42	172725	1	Pulley
43	157081	1	Spacer
44	174723	1	Cable Guard
45	108418	1	Screw
46	717524	1	Hex Jam Lock Nut, 3/8"-16
47	174215	1	Pin
48	722005	1	Cotter Pin, 3/32" x 7/8"
49	153058	1	Pin
50	8161045	1	Spring Clip
51	164304	1	Arm Assembly
52	164284	1	Arm Assembly
53	720006	4	Lockwasher, 7/16"
54	705041	4	Hex Capscrew, 7/16"-14 x 1"
55	154202	1	Draw Bar Assembly
56	157091	1	Pull Bar
57	1608759	1	Spacer
58	705052	1	Hex Capscrew, 7/16" - 14
			x 2-1/4"
59	154203	1	Draw Bar

#### **BEVEL GEAR HOUSING**



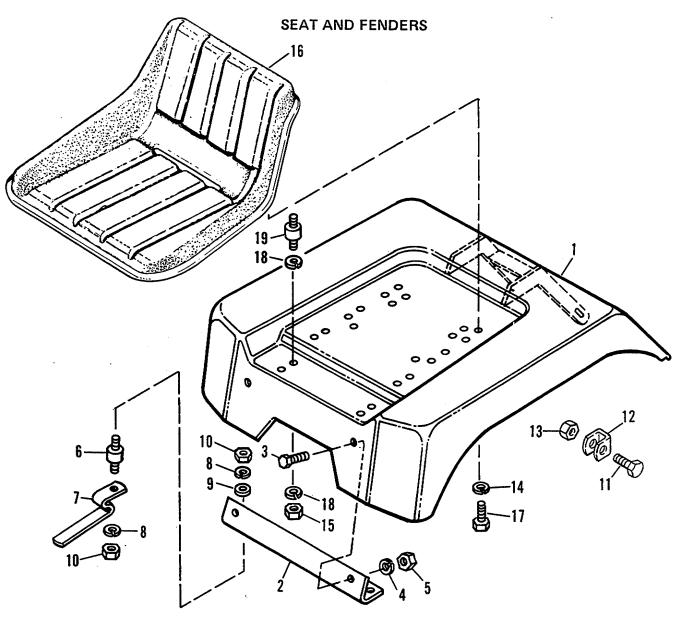
Ref. No.	Part No.	Qty. Req.	Description
1	171797	1	Bevel Gear Housing, w/Bearings
2	178105	1	Plug Assy., Oil Fill
3	173966	1	Driven Shaft
4	715092	4	Hex Capscrew, 7/16"-14 x 1-1/4"
5	717517	1	Hex Jam Nut
6	171792	1	Spacer
7	171790	5	Shim (As Required)
8	171791	1	Shim
9	171787	1	Oil Seal
10	172256	1	Ball Bearing
11	171796	1	Bevel Driven Gear
12	172206	1	Retaining Ring
13	725003	1	Key
14	154279	1	Needle Bearing
15	118117	1	Oil Seal
16	172750	1	Drive Shaft
17	118117	1	Oil Seal
18	154279	1	Needle Bearing

Ref. No.	Part No.	Qty. Req.	Description
19	172256	1	Ball Bearing
20	172206	1	Retaining Ring
21	172753	1	Washer
22	154040	1	Bearing Clamp Plate
23	720001	1	Lockwasher, 5/16"
24	705012	1	Hex Capscrew, 5/16"-18x5/8"
25	172752	1	Bevel Driven Gear
26	725003	1	Key
27	177649	2	Washer, Compression
28	154281	1	Hex Capscrew, 5/16''-18x 3/4''
29	154282	1	Gasket
30	178104	1	Housing Cover Assembly
31	726002	1	Pipe Plug
32	715136	6	Hex Capscrew, 7/16"-14 x 1"
33	715092	4	Hex Capscrew, 7/16"-14x1-1/4"
34	707003	6	Hex Capscrew, 1/4"-20 x 5/8"
35	175127	1	Right Hand Side Plate Assy.
36	174829	1	Left Hand Side Plate Assy.
37	720006	14	Lockwasher, 7/16"



Ref. No.	Part No.	Qty. Req.	Description
1	173965	1	Inner Spring Guide
2	172206	1	Ring, Retaining
3	171772	1	Spring
4	174859	1	Bushing Assembly
5	157273	1	Stud
6	173956	1	Pulley
7	174862	1	Clutch Plate Assembly
8	8061081	1	Key
9	718063	1	Washer Base Lock Nut
10	172206	1	Ring, Retaining
11	173957	1	Brake Disc
12	715162	4	Socket Hd. Screw, 1/4"-20 x 5/8"
13	174013	1	Support Brake Assembly
14	717519	1	Full Hex Lock Nut, 7/16" - 14
15	705017	1	Hex Capscrew, 5/16"-18 x 3/4"
16	717511	1	Full Hex Lock Nut, 5/16" - 18
17	174451	1	Pivot Assembly
18	715186	2	Thread Forming Screw,
			5/16" - 18 x 3/4"
19	171371	2	Bushing
20	164155	1	Handle Assembly
21	173988	1	Control Rod
22	717001	2	Full Hex Nut, 5/16" - 18
23	173991	1	Lever

Ref. No.	Part No.	Qty. Req.	Description
24	174686	1	Special Capscrew, 5/16" UNC-2A x 7/8" Grade 5
25	174664	1	Handle, Clutch PTO
26	172038	1	Knob
27	717510	1	Full Hex Lock Nut, 3/8" - 16
28	174455	1	Pivot Arm Assembly
29	170289	1	Belt Stop
30	105306	1	Pulley
31	705006	1	Hex Capscrew, 3/8"-16 x 2"
32	157081	1	Spacer
33	720002	1	Lockwasher, 3/8"
34	717003	1	Full Hex Nut, 3/8" - 16
35	719002	2	Plain Washer, 5/16"
36	173982	1	Idler Pulley
37	705006	1	Hex Capscrew, 3/8" - 16 x 2"
38	172329	1	Spacer
39	720002	l	Lockwasher, 3/8"
40	717003	1	Full Hex Nut, 3/8" - 16
41	719002	1	Plain Washer, 5/16"
42	157262	1	Spring Tension
43	164047	1	Spring Tension Rod
44	175316	1	Conical Spring
45	722007	1	Cotter Pin, 3/16" x 1-1/2"
46	170291	1	Spacer



Ref. No.	Part No.	Qty. Req.	Description
1	166111	1	Seat Deck Assembly
2	164029	1	Seat Deck Bracket, Front
3	705012	2	Hex Capscrew, 5/16"-18 x 5/8"
4	720001	2	Lockwasher, 5/16"
5	717001	2	Full Hex Nut, 5/16"-18
6	157094	2	Cushion Connector, Front
7	1606823	2	Spring Clip
8	720001	4	Lockwasher, 5/16"
9	719006	2	Washer, 1/4"
10	717001	4	Full Hex Nut, 5/16"-18
11	705016	2	Hex Capscrew, 3/8"-16 x 1-1/4"
12	1607870	2	Seat Deck Stop
13	717510	2	Full Hex Lock Nut, 3/8"-16
14	720001	2	Lockwasher, 5/16"
15	717001	4	Full Hex Nut, 5/16"-18
16	171153	1	Contour Seat Assembly
17	705012	2	Hex Capscrew, 5/16"-18 x 5/8"
18	720001	4	Lockwasher, 5/16"
19	159085	2	Cushion Connector